DOCUMENT RESUME

ED 370 253 EC 301 933

TITLE	DEC Recommended Practices: Indicators of Quality in Programs for Infants and Young Children with Special Needs and Their Families.
INSTITUTION	Council for Exceptional Children, Reston, VA. Div. for Early Childhood.
REPORT NO	ISBN-0-86586-234-6
PUB DATE	93
NOTE	148p.; For each recommended practice, see EC 301 934-948.
AVAILABLE FROM	Council for Exceptional Children, 1920 Association Dr., Reston, VA (Stock No. D417: $20, member price $14).
PUB TYPE	Viewpoints (Opinion/Position Papers, Essays, etc.) (120)
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Adaptive Behavior (of Disabled); Cognitive Development; Communication Skills; Curriculum; Delivery Systems; *Disabilities; Early Childhood Education; *Early Intervention; Educational Assessment; *Educational Practices; *Educational Quality; Emotional Development; Family Involvement; *Gifted; Individualized Education Programs; Infants; Interpersonal Competence; Program Development; Program Evaluation; Psychomotor Skills; Special Education; Special Needs Students; Student Evaluation; Transitional Programs; *Young Children
IDENTIFIERS	Council for Exceptional Children; Individualized Family Service Plans; *Quality Indicators

ABSTRACT

This document describes a set of indicators that the Division for Early Childhood (DEC) Task Force on Recommended Practices recommends for early intervention and early childhood special education (EI/ECSE) programs for infants and young children with special needs and their families. The indicators are designed to be used by professionals in examining practices currently employed in EI/ECSE programs and in developing programs, and for families to use in selecting a program. The indicators are research-based or value-based, family-centered, compatible with a multicultural perspective, involving members of various disciplines, developmentally and chronologically age appropriate, and normalized. Indicators address the following specific program areas: assessment, family participation, individualized family service plans and individualized education programs, service delivery models, general curriculum and intervention strategies, interventions to promote cognitive skills, interventions to promote communication skills, interventions to promote social skills and emotional development, interventions to promote adaptive behavior skills, interventions to promote motor skills, transition, personnel competence, program evaluation, and early intervention with children who are gifted. For each set of indicators, a narrative discussion outlines a rationale for inclusion and implications for intervention. References accompany each section. (JDD)

ED 370 253

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

DEC Recommended Practices:

Indicators of Quality in Programs for Infants and Young Children with Special Needs and Their Families

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
CEC
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

DEC Task Force on Recommended Practices
1993

EC 301933

BEST COPY AVAILABLE

Copyright © 1993 by Division for Early Childhood

Council for Exceptional Children

ISBN 0-86586-234-6

Distributed by the Council for Exceptional Children, Reston, VA. Stock Number D417

These materials may be freely reproduced for education/training or related activities. There is no requirement to obtain special permission for such uses. We do, however, ask that the following statement appear on all reproductions:

Reproduced from

DEC Recommended Practices:

Indicators of Quality in Programs for Infants and Young

Children with Special Needs and Their Families

Division for Early Childhood, Council for Exceptional Children

DEC Executive Office
320 East North Avenue
Pittsburgh, PA 15212
412/359-1636

This permission statement is limited to the reproduction of materials for education/training or related activities. Systematic or large-scale reproduction for distribution -- or inclusion of items in publications for sale -- may be done only with prior written permission from the Division for Early Childhood.

BEST COPY AVAILABLE

DEC Recommended Practices:

Indicators of Quality in Programs for Infants and Young Children with Special Needs and Their Families

Task Force on Recommended Practices

Division for Early Childhood

Council for Exceptional Children

1993

Acknowledgements

The Task Force would like to acknowledge the great assistance provided by individuals involved in the process of creating this document. At Vanderbilt University, Ms. Pam Neidert was instrumental in preparing the final draft of this product. During the validation study, Dr. Odom received support from the postdoctoral training program at the University of California at Santa Barbara (UCSB), coordinated by Dr. Mel Semmel. Ms. Gretchen Butera and the students in the Early Childhood Program at UCSB provided great assistance in piloting early drafts of the validation questionnaire. At Auburn University, Ms. Altamese Stroud-Hill prepared the validation questionnaire, and Mrs. Toni Locklar and Mrs. Keren Self were responsible for organizing and implementing both mailings of the questionnaire. At the University of North Dakota, Mickey Koerner typed and maintained the lists of all of those who participated in the validation process. Special acknowledgement also goes to the staff of the Auburn Intervention Model (Project AIM), Auburn, Alabama, for their assistance in piloting the validation questionnaire. Dr. Larry Johnson at the University of Cincinnati coordinated the data analysis of the validation survey results, and was assisted by Maggie LaMontaigne. Ms. Joan Ramsey was very helpful in organizing conference calls and coordinating communications with the DEC Executive Office. Last, and very importantly, the many DEC members, family members, and higher education personnel who read, evaluated, and commented upon the indicators during the validation survey provided invaluable assistance.

Samuel L. Odom and Mary E. McLean

Co-Chairpersons,

DEC Recommended Practices Task Force

Table of Contents

Establishing Recommended Practices for Programs for Infants and Young Children with Special Needs and Their Families 1

Assessment 11
DEC Recommended Practices 17

Family Participation 19
DEC Recommended Practices 26

IFSPs and IEPs 30
DEC Recommended Practices 37

Service Delivery Models 40
DEC Recommended Practices 47

General Curriculum and Intervention Strategies 50
DEC Recommended Practices 58

Interventions to Promote Cognitive Skills 61
DEC Recommended Practice 68

Interventions to Promote Communication Skills 69
DEC Recommended Practices 75

Interventions to Promote Social Skills and Emotional Development 77
DEC Recommended Practices 82

Interventions to Promote Adaptive Behavior Skills 84
DEC Recommended Practices 90

Interventions to Promote Motor Skills 91
DEC Recommended Practices 95

Transition 96
DEC Recommended Practices 105

Personnel Competence 107
DEC Recommended Practices 114

Program Evaluation 118
DEC Recommended Practices 124

Early Intervention with Children who are Gifted 127
DEC Recommended Practices 135

Chairpersons

Co-Chairpersons of DEC Recommended Practices Task Force

Samuel L. Odom, Vanderbilt University
Mary E. McLean, University of North Dakota

Assessment

John T. Neisworth, Pennsylvania State University

Family Participation

Lisbeth Vincent, California State University at Los Angeles
Julie Beckett, University of Iowa

IEP/IFSP

Ann Turnbull, University of Kansas
Corrine Garland, Child Development Resources

Service Delivery Models

Philip Strain, Allegheny-Singer Research Institute
Robin McWilliam, University of North Carolina

General Curriculum/Intervention Strategies

Mark Wolery, Allegheny-Singer Research Institute

Interventions for Cognitive Skills

Carl Dunst, Allegheny-Singer Research Institute

Interventions for Communication Skills

Howard Goldstein, University of Pittsburgh

Interventions for Social Skills and Emotional Development

Mary A. McEvoy, University of Minnesota
Paul Yoder, Vanderbilt University

Interventions for Motor Skills

Rebecca F. Fewell, University of Miami

Interventions for Adaptive Behavior Skills

Eva Horn, Vanderbilt University

Transitions

Mary Beth Bruder, University of Connecticut
Lynette K. Chandler, Northern Illinois University

Personnel Competence

Pat Miller, Appalachian State University
Vicki Stayton, Western Kentucky University

Program Evaluation

Scott Synder, University of Alabama at Birmingham

Programs for Children who are Gifted

Steve Stile, New Mexico State University

Establishing Recommended Practices for Programs for Infants and Young Children with Special Needs and Their Families

Samuel L. Odom and Mary E. McLean

Programs for infants and young children with special needs and their families have become an accepted and valued practice in our society. By law (PL 99-457, amended by PL 102-119), preschool-aged children with disabilities (and their families) are entitled to early intervention services, and many states have chosen to provide such services for infants and toddlers and their families (Thiele & Hamilton, 1991). This institutionalization of early intervention practice has been pushed by a research literature that has documented the positive effects of such intervention practices upon children and families (Ramey & Ramey, 1992; Shonkoff & Hauser-Cram, 1987) as well as compelling popular opinion that early intervention, as reflected through Head Start and other programs, is a good investment of resources.

Early intervention and early childhood special education practices have evolved systematically over the last 25 years. An active program of research and development supported by the federal government (HCEEP and EECDP model demonstration programs), program development at the state and local levels, and an active research literature (e.g., Journal of Early Intervention, Topics in Early Childhood Special Education) have provided information upon which program developers can base their decisions about practices that they should include in their program. In addition, movements within the field, which reflect the values of professionals and families, have provided a basis upon which to choose practices.

Perhaps because of the quantity of information available to program providers and parents, professionals have attempted to establish "Best Practice" within the field of early intervention and early childhood special education. Authors and task forces within states have created a list of practices from research literature and clinical experience (DeStefano, Howe, Horn, Smith, 1991; Hanson & Lynch, 1989; McDonnell & Hardman, 1988), and in some cases such lists have been validated at the state level (Arizona State Department of Education, 1987). These reviews and summaries represent important first steps in determining practices that would be recommended to the field. A next step would be to involve experts, practitioners and families, at a national level, in the actual identification of practices and to validate the practices with a broader group of practitioners or families.

Purpose of DEC Recommended Practice Document

The purpose of this document is to describe a set of indicators that the Division for Early Childhood (DEC) recommends for early intervention and early childhood special education (EI/ECSE) programs for infants and young children with special needs and their families. The indicators may be useful in several ways. Professionals may use them to examine the practices that they currently employ in their programs. Individuals starting early intervention or early childhood special education programs may use these indicators as a guide for selecting practices for their program. Also, family members may use the indicators described in this booklet as a "consumer" guide for selecting a program for their child with special needs.

A Note on terminology.

"Best Practice" is a label that is commonly applied to indicators such as those included in this book. In fact, the Task Force responsible for this document initially used this term to describe the practices included on the following pages. However, Best Practice implies that a practice or set of practices is most appropriate for all children with special needs and families. In some cases this may be true, but an assumption that serves as the foundation for this field is that practices have to be selected and used based upon the individual needs of a child and family. As such, we have chosen to use the terms "Recommended Practice" and "Indicators of Quality" as a way of conveying that the practices are recommended for programs, reflect quality services, and have substantial support from the field. **However, program providers and families must base their decision about using any of these practices upon the needs of specific children and families.**

"Best" or "Recommended" practices are by nature time-bound. From the process that we followed (described below) we are confident that the practices in this document are useful and important for EI/ECSE programs in the early 1990s. However, the field is pushed by a number of factors (e.g., a research base, changing population, political climate). Practices that are recommended today may be obsolete tomorrow. Thus, we recommend that these indicators of quality are a first step in identifying recommended practices. Periodically (e.g., every three to five years) these practices should be reexamined and updated.

Criteria for Recommended Practices

To choose practices that could be recommended to program providers and families, one must first establish criteria. These criteria are assumptions about the factors that are important in EI/ECSE. In this undertaking, to be considered as a "Recommended Practice," indicators had to reflect or at least be compatible with the criteria described below.

Research Based or Value-Based

Recommended practices are supported by research that demonstrates positive effects for infants, young children with disabilities, and/or their families. It is possible that some indicators are firmly held as recommended practice, but a program of research has not been conducted to demonstrate their positive effects. That is, they reflected the values of our field and may precede empirical validation. In such cases, indicators would be value-driven and supported by a consensus within the field.

Family-Centered

Recommended practices are family-centered if they are concerned about the welfare of the family and the welfare of the child rather than focusing exclusively on the child. The family (inclusive of the child) becomes the center of intervention decisions and efforts. The intervention program is peripheral to the family, facilitating the family's objectives and priorities for the child.

Multicultural Emphasis

Recommended practices are compatible with a multicultural perspective. That is, practices must be able to be adapted for use with children or families who hold values or identify themselves as members of ethnic groups that differ from the mainstream in American society. Such a multicultural emphasis must acknowledge not only the individualized needs of children or families, but also the individual value system of the cultural group with whom they identify.

Cross Disciplinary Participation

Practices should involve the efforts of members of various disciplines working as a team rather than as individiual professionals. Such efforts necessitate that members of the team function together as a unit sharing their discipline-specific information and skills. Team members may share roles and responsibilities across disciplines. Frequent communication among team members is necessary to ensure joint decision making and information sharing.

Developmentally/Chronologically Age Appropriate

Developmentally appropriate has been defined by the National Association for the Education of Young Children (NAEYC) in relation to programs for typical young children as the extent to which knowledge of child development is applied in program practices (Bredekamp, 1987). The concept of developmentally appropriate practice may be equated with the "problem of the match" (i.e., matching the learning environment and experiences to the child's developmental level). The guidelines developed by NAEYC for ensuring developmentally appropriate practice are also appropriate for the early education of children with special needs; however, Wolery, Strain and Bailey (1992) noted that the guidelines alone are not likely to be sufficient for many children with special needs. A match must also be made on the basis of the unique learning needs presented by the child with special needs within the context of an environment and learning experiences that are chronologically age appropriate. In other words, a four year old with severe impairments should be in learning environments appropriate for typical four year olds with learning activities which match his unique needs.

Normalized

Normalization has been defined by Nirje as "making available to all persons with disabilities... patterns of life and conditions of everyday living which are as close as possible to... the regular circumstances and ways of life of society" (Cited in Bailey & McWilliam, 1990). Bailey and McWilliam (1990) remind us that the normalization principle is not equivalent to mainstreaming as a service delivery option. Normalization also involves aspects of the physical environment, teaching strategies and family involvement. A continuum of services should be considered by the family and professional team as service delivery decisions are being made. If a mainstreamed or inclusive setting is not selected for service delivery, the normalization principle still applies to the manner in which intervention is undertaken. Similarly, inclusion in a regular early childhood setting alone does not ensure that the normalization principle has been followed. Bailey and McWilliam (1990) suggest that normalization is followed when the least intrusive and most normal strategies are being followed to achieve effective intervention.

The Process for Identifying Recommended Practices

At the Spring, 1991 Conference of the Council for Exceptional Children, the DEC Executive Board established the Best Practice Task Force (now the Recommend Practices Task Force). The purpose of the task force was to identify practices that would indicate quality EI/ECSE and that could be recommended to the field. The following individuals participated as members of the task force:

Samuel L. Odom and Mary E. McLean, Co-Chairs

Susan Fowler, President of DEC

Larry Johnson, Chair, DEC Research Committee

Mary McEvoy, Chair, DEC Publications Committee

Susie Perrett, Co-Chair, DEC Family Concerns Committee (and parent)

Christine Salisbury, President-Elect of DEC

Barbara Smith (ex-officio), Executive Director of DEC

Vicki Stayton, Co-Chair, DEC Personnel Preparation Committee

Daphne Thomas, Chair, DEC Multicultural Committee

Through a series of conference calls in the Summer of 1991, the Task Force determined the process for identifying recommended practices, the individuals who would have major roles in this process, and the format for disseminating this information. During these calls, the Task Force determined the dimensions of EI/ECSE that reflected logical divisions of the field. These divisions were called "Strands", and chairpersons, who were leaders in the field for each particular area, were appointed. The individual strands and their chairpersons are listed at the front of this booklet.

Incorporating the views and perspectives of experts, practitioners, and family members into the development of the recommended indicators was an essential aspect of this process. Strand Chairs were asked to invite individuals with expertise in their strand areas to attend a working session that immediately followed the DEC Conference in St. Louis in 1991. A notice was placed in the DEC Communicator describing the working sessions and inviting the DEC membership to participate. In addition, the DEC Family Concerns committee organized, and DEC provided some financial support for, parent participation. As a result, there was at least one parent participant in each of the working groups.

At the working sessions, which lasted from two to four hours, participants identified recommended practices for each strand. Following the meetings, Strand Chairs edited the resulting list of indicators, sent them out to participants to approve, after receiving comments from the participants, and sent the revised list to the Task Force Co-Chairpersons.

The Co-Chairpersons again edited the indicators (i.e., for redundancy and style) and created a validation questionnaire. This questionnaire required respondents to rate each item as to their agreement that the item represented a Best Practice (strongly agree, agree, disagree, strongly disagree, don't know, or don't understand). Also, participants rated the extent to which the practice is currently used in programs (frequently, sometimes, rarely, never, or does not apply to programs respondent is familiar with). This questionnaire was then sent to a sample of 800 individuals for validation.

The validation sample was made up of three groups. The first group was composed of 400 DEC members. These included members who volunteered to review the indicators, all DEC subdivision officers, and members randomly selected from the membership list. The second group, (n=200) was family members. These individuals were suggested by the DEC Family Concerns Committee, suggested by DEC subdivision presidents, were family members of state interagency coordinating councils, or were family members of the national Parent Training and Information Centers. The third group was composed of 200 individuals from higher education and administrative positions. These individuals were field reviewers for the Journal of Early Intervention and Topics in Early Childhood Special Education, were nominated by Strand Chairs as having expertise, or were listed by the Teacher Education Division of CEC as associated with personnel preparation programs in EI/ECSE. In addition, 41 individuals who hold joint membership in DEC and The Association of the Gifted (TAG), of CEC, were asked to validate the strand for children who are gifted.

The initial mailing to these respondents occurred in June, 1992, and postcard reminders were mailed two weeks later. A second mailing occurred approximately one month after the postcard reminder. By August, 1992, over 60% of the respondents had returned their questionnaires, which was the minimum criteria established for this questionnaire. The criteria established for judging that specific items were or were not considered to be "best" practice was that at least 50% of the respondents rate the items as "strongly agree" or agree. All of the items in this document passed this criterion.

Conclusion

The intent and hope of all individuals participating in this process is that the list of recommended practices that follows will provide guidance in developing or evaluating programs for infants and young children with special needs and their families. Furthermore, it is hoped that issues raised during this process will provide a stimulus and focus for future research. As noted above, these recommended practices reflect the "state of the art" of EI/ECSE as it exists today. What is "state of the art" today may be archaic five years from now. Only a continuing process of review and revision will maintain the quality of a set of indicators that essentially defines the field. Therefore, with this work we hope that we have begun a process which will involve periodic and continual review and discussion of recommended practice for our field.

References

Arizona State Department of Education (1987). Early intervention quality indicators. Unpublished manuscript, Tucson, AZ.

Bailey, D. B., & McWilliam, R. (1990). Normalizing early intervention. Topics in Early Childhood Special Education, 10(2), 33-47.

Bredekamp, S. (Ed.). (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8. Washington, D.C.: NAEYC.

DeStefano, D. M., Howe, A. G., Horn, E. H., & Smith, B. (1991). Best practice in early childhood special education. Tucson, AZ: Communication Skill Builders, Inc.

Hanson, M. J., & Lynch, E. W. (1989). Early Intervention: Implementing child and family services for infants and toddlers who are at-risk or disabled. Austin, TX: PRO-ED.

McDonnell, A. & Hardman, M. (1988). A synthesis of "best practice" for early childhood services. Journal of the Division for Early Childhood, 12, 32-341.

Nirje, B. (1985). The basis and logic of the normalization principle. Australia and New Zealand Journal of Developmental Disabilities, 11(2), 65-68.

Ramey, S. L., & Ramey, C. T. (1992). Early educational intervention with disadvantaged children - To what effect? Applied & Preventive Psychology, 1, 131-140.

Shonkoff, J. P., & Hauser-Cram P. (1987). Early intervention for disabled infants and their families: A quantitative analysis. Pediatrics, 80, 650-658.

Thiele, J. E., & Hamilton, J. L. (1991). Implementing the early childhood formula: Programs under PL 99-457. Journal of Early Intervention, 15, 5-12.

Wolery, M., Strain, P. S., & Bailey, D. B. (1992). Reaching potentials of children with special needs. In S. Bredekamp & T. Rosegrant (Eds.), Reaching potentials: Appropriate curriculum and assessment for young children (pp. 99-111). Washington, D.C.: NAEYC.

Assessment

John T. Neisworth

Assessment is a tool to help us accomplish the missions of early intervention and education. When used properly, assessment can help to detect child needs and environmental circumstances that may create problems; to identify child strengths and weaknesses so that appropriate programs can be planned; to identify special family circumstances and needs that may assist in planning for progress; to keep track of changes in child behavior and accomplishments and family needs; and to estimate the effectiveness of teaching, therapy, and other efforts.

The purposes for assessment require different materials and procedures (Neisworth & Bagnato, 1988). Tools for detecting possible special needs (screening) are not the same as those used to provide the details needed for identifying appropriate instructional objectives (program planning). Likewise, special materials are available for monitoring progress and estimating the impact of intervention (program evaluation) (Bailey & Wolery, 1989). Family needs and resources can also be appraised, and again, this type of assessment demands unique materials and methods (Bailey & Simmeonsson, 1988). In order to carry out the various jobs of assessment, there are several practical and sensible ideas that form the foundation for recommended practices in assessment for early intervention.

Members of the working group for this strand were: Steve Bagnato, Samera Baird, Angela Capone, Kevin Cole, Mary Ann Demchak, Barbara Fink, Katheryn DeLaurin, Katherine McCormick, Karen Smith, Tammy Tiner, and Christine Weisenberger.

Foundations for Assessment

Assessment Must Be Useful For Early Intervention and Education

That assessment should be useful seems unnecessary to state, yet much traditional assessment is not useful for helping infants and young children. The materials and procedures used with infants and preschoolers must meet certain standards of treatment utility (Hayes, Nelson, & Jarrett, 1987).

Assessment must clearly identify developmental or behavioral objectives for change. It is insufficient for the assessment merely to identify a condition (e.g., learning disability or mental retardation). Instead, specific developmental or behavioral aspects must be cited, such as problems with attention, fine motor coordination, attachment, or sensory limitations. In addition, the needs identified by the assessment must be ones that can be addressed. A "disturbed personality," "subnormal intelligence," or "minimal brain injury" are not helpful assessment results. In brief, to have treatment utility, an assessment must identify specific needs and characteristics that can be improved through instruction, therapy, or changes in the child's circumstances.

Assessment should help to select and guide treatment activities. Assessment should assist in selecting major helpful services, materials, or methods. Assessment may be good at identifying a problem, but if there is no available service, such assessment has little treatment utility and is not of any particular value.

Assessment should contribute to evaluating intervention or program efficacy. To meet this level of utility, assessment should be of value for monitoring change (i.e., for providing feedback on the potency of methods and materials). Professionals concerned with program accountability should be aware that many conventional measures (e.g., IQ, personality) are not useful for evaluation (Neisworth, Bagnato, 1982). Such instruments may not be sensitive enough to detect change because they contain too few items or too wide of differences in scaled intervals (Bagnato, Neisworth, & Munson, 1989).

Assessment Must Be Judged as Valuable and Acceptable

As professionals, we recognize the importance of designing and tailoring our assessment practices to meet certain standards of social validity (Neisworth & Fewell, 1990).

Assessment should identify goals and objectives that are judged as worthwhile and important. It is not good enough to identify instructional or therapeutic objectives that are of little consequence to the child's future. Tasks found on numerous traditional assessment devices are often not worthwhile as developmental or educational objectives (e.g., stacking blocks, putting pegs in holes, standing on one foot). Parents and teachers must agree that the targets identified through assessment are worthy to include in the child's IFSP or IEP (Bagnato et al., 1989). Similarly, our assessment of program effectiveness must examine dimensions or aspects of child change that are seen as worthwhile. So, too, the magnitude of assessed change must be perceived as significant. Assessment devices or analyses that produce global numbers or "statistically significant" changes may not be judged as socially or practically significant.

Assessment materials and methods themselves should be judged as acceptable. The concern here is whether the clients involved (parents, teachers, and perhaps children) agree to specific assessment devices and the approaches used. Requiring that the consumer accept the assessment and see its importance goes a long way in producing the rapport and validity so necessary to accurate assessment. The use of socially approved assessment materials and procedures is consistent with family centered practices and is fundamental to early intervention which is, after all, a social enterprise (Bailey & Simmeonsson, 1988).

Assessment Decisions Must Be Bases On A Wide Base Of Information

A single test, person, or occasion is not a sufficient source of information. This means that we must gather information from several sources, instruments, settings, and occasions to produce the most valid description of the child's status or progress. Additionally, assessment must examine multiple domains or aspects of child functioning, rather than a narrow focus on a deficit. Use of a convergent assessment model provides two strong advantages: (a) a richer and broader sampling of the child's development and behavior, thus increasing the validity of the description produced by the assessment, and (b) a composite view of the child derived from several professional perspectives. Comprehensive, convergent assessment involves meeting these standards described below (Bagnato & Neisworth, 1990).

Assessment batteries should contain several types of scales (e.g., norm-based, curriculum-based, judgment-based, and eco-based) and include observation and interviews in order to provide the most valid appraisal of the child's status, needs, and progress. Assessment must not be focused on a single developmental dimension, but should be developmentally inclusive (e.g., encompass language, motor, social, and cognitive, as well as other aspects). This inclusiveness is critical since all aspects of development are interrelated, and a problem in one influences progress in the others.

Assessment should include data and reports from parents and other significant individuals who may be able to supplement or challenge other findings. No single perspective--whether that of the parent, psychologist, teacher, or other professional--can be defended as the most valid or useful description of a child's strengths, weaknesses, or potential for development (Gibb & Teti, 1990). Both parents and professionals can be considered as valid sources of information for assessment and clinical judgment, adding unique and valuable information about the child's abilities in a variety of functional areas. Assessment decisions are best made through collaborative efforts of professionals and parents. Team decision making provides a way to reach a more fully informed, richer perspective of family needs.

Assessment must be done on multiple occasions, especially with young children. Infants and preschoolers change rapidly, and often vary in their performances from week to week or even day by day. Efforts to appraise the child's development are better spaced over several occasions, and progress tracking must certainly be over multiple points in time to detect real and stable changes and trends (Bagnato & Neisworth, 1991).

In summary, assessment for early intervention is "recommended practice" when it meets standards of treatment utility, social validity, and comprehensiveness. Moreover, assessment procedures and decisions must be in collaboration with the families of the infants and children we serve.

References

Bagnato, S. J., & Neisworth, J. T. (1990). System to Plan Early Childhood (SPECS). Circle Pines, MN: American Guidance Service, Inc.

Bagnato, S. J., & Neisworth, J. T. (1991). Assessment for early intervention: Best practices for professionals (Chapter 2). New York, NY: Guilford.

Bagnato, S. J., Neisworth, J. T. & Munson, S. M. (1989). Linking developmental assessment and early intervention: Curriculum-based prescriptions (2nd ed.). Rockville, MD: Aspen.

Bailey, D. B., & Simmeonsson, R. J. (1988). Family assessment in early intervention. Columbus, OH: Merrill.

Bailey, D., & Wolery, M. (1989). Assessing infants and preschoolers with handicaps. Columbus, OH: Merrill.

Gibbs, E. D., & Teti, D. M. (1990). Interdisciplinary assessment of infants. A guide for early intervention professionals. Baltimore, MD: Paul Brookes.

Hayes, S. C., Nelson, R. O., & Jarrett, R. B. (1987). The treatment utility of assessment: A functional approach to evaluating assessment quality. American Psychologist, 42, 963-974.

Neisworth, J. T., & Bagnato, S. J. (1988). Assessment in early childhood special education: A typology of dependent measures. In S. L. Odom & M. L. Karnes (Eds.), Early intervention for infants and children with handipcaps (pp. 23-49). Baltimore: Paul H. Brookes.

Neisworth, J. T., & Bagnato, S. J. (1992). The case against intelligence testing in early intervention. Topics in Early Childhood Special Education, 12(1), 1-20.

Neisworth, J., & Fewell, R., (Eds.). (1990). Judgment-based assessment. Topics in Early Childhood Special Education, 10(3).

2

DEC Recommended Practices
Assessment

Assessment in early intervention refers to the systematic collection of information about children, families, and environments to assist in making decisions regarding identification, screening, eligibility, program planning, monitoring, and evaluation.

Preassessment Activities

A1. Professionals contact families and share information about the assessment process.

A2. Professionals solicit and review existing information from families and agencies.

A3. Professionals and families identify the questions and concerns that will drive the choice of assessment materials and procedures.

A4. Professionals and families identify pertinent agencies, team members, and team approaches to be employed (e.g., inter-, multi-, transdisciplinary approach).

A5. Professionals and families identify a mode of teaming that fits individual children's needs and families' desires to collaborate.

Procedures for Determining Eligibility, Program Placement, Program Planning and Monitoring

A6. Professionals gather information from multiple sources (e.g., families, other professionals, paraprofessionals, and previous service providers) and use multiple measures (e.g., norm-referenced, interviews, etc).

A7. Professionals gather information on multiple occasions.

A8. Team members discuss qualitative and quantitative information and negotiate consensus in a collaborative decision-making process.

A9. Team members select assessment instruments and procedures that have been field-tested with children similar to those assessed for the purposes intended.

A10. Assessment approaches and instruments are culturally appropriate and nonbiased.

A11. Professionals employ individualized, developmentally compatible assessment procedures and materials that capitalize on children's interests, interactions, and communication styles.

A12. Materials and procedures, or their adaptations, accommodate the child's sensory and response capacities.

A13. Professionals assess strengths as well as problems across developmental or functional areas.

A14. Measures and procedures facilitate education and treatment (i.e., intervention or curriculum objectives) rather than only diagnosis and classification.

A15. Measures are sensitive to child and family change.

A16. Professionals assess not only skill acquisition, but also fluency, generalization, and quality of progress.

A17. Professionals maintain confidentiality and discretion when sharing information.

A18. Curriculum-based assessment procedures are the foundation or "mutual language" for team assessment.

Assessment Reports

A19. Professionals report assessment results in a manner that is immediately useful for planning program goals and objectives.

A20. Professionals report assessment results so that they are understandable to and useful for families.

A21. Professionals report strengths as well as priorities for promoting optimal development.

A22. Professionals report limitations of assessments (e.g., questions of rapport, cultural bias, and sensory/response requirements).

A23. Reports contain findings and interpretations regarding the interrelatedness of developmental areas (e.g., how the child's limitations have affected development; how the child has learned to compensate).

A24. Professionals organize reports by developmental/functional domains or concerns rather than by assessment device.

Family Participation

Lisbeth J. Vincent and Julie Ann Beckett

Family participation or involvement in their child's early intervention program has been accepted as both a necessary and a valuable practice since the 1970's. Over the past two decades, families have changed and early intervention has changed (Hanson & Lynch, 1992; Vincent & Salisbury, 1988; Vincent, Salisbury, Strain, McCormick & Tessier, 1990). The passage of PL 99-457 in October 1986 confirmed a commitment to active involvement and participation by families in not only the early intervention porcess of their own child, but also the development of early intervention systems and services from a statewide and local community perspective (Garwood & Sheehan, 1989). Recommended practice in early intervention includes families as policy makers as well as decision makers on behalf of their children.

The definition of family participation which has guided the development of these recommended practices is as follows: families are equal members in, can join together with staff and can take part in all aspects of the early intervention system, including all aspects of their child's care and all levels of decision making.

Values and Beliefs which Underlie the Recommended Practices

The following values and beliefs served as the foundation for the development of the recommended practices.

1. People (families and service providers) are competent and can become more so

---

Members of the working group for this strand were: Julie Ann Beckett, Mary Jane Brotherson, Linda Brown, Carol Cole, Laurie Dinnebell, Larry Edelman, Linda Frederick, Evelyn Hale, Glinda Hill, Roxanne Kaufman, Iolene A. Lund, and Virginia McDonald.

2. People (families and service providers) are doing the best they can given their circumstances

3. Both service providers and the family bring to a relationship their past experiences, personal values and beliefs that provide unique contexts in which to view early intervention services

4. Family is self-defined

5. Cultural/racial/ethnic background is self-defined and must be respected

6. Family participation is self-defined; it can vary along a number of dimension and levels of intensity

7. Partnership is a process

8. Getting started in a partnership requires orientation (e.g., to players, roles, overt and covert agendas, funding sources, rights and responsibilities)

9. Both service providers and parents will need orientation and/or training to work within a collaborative partnership

10. Family participation is essential in all levels of program (e.g., hiring, model planning, implementation, evaluation)

11. In order to achieve participation at all levels, there must be a variety of ways for families to participate (e.g., in program evaluation area family could be interviewed, complete a checklist, participate in a focus group)

12. Cross cultural/racial/ethnic/educational/economic participation and representation that reflect the community is essential

13. Participants/partners must be nonjudgemental

14. Family participation options must be flexible

15. Partners must develop a knowledge and appreciation of relationship building; providers must be aware of group dynamics

16. Collaboration is the model and requires developing a common language

17. Family participation is enhanced when we give families what they ask for

18. Parent/professional partnerships can be enhanced when both members of the partnership are provided with training to enhance their skills

19. Within the field of personnel preparation, service providers and potential service providers need to be adequately prepared to work in partnership with parents

20. The unique knowledge, resources, and experiences of each family must be respected

21. Families provide the primary human attachments and early social relationships for infants

22. Clear and open communication must be established among parents and professionals

23. The family's interaction and decision making styles must be respected

24. Family participation is stronger when families are working with confident, well supported professionals

25. Families know what they need to enhance their development

26. No amount of intervention can take the place of what the family brings to the child

27. Collaboration will take place only when the family is the final decision maker and the team is the implementer of decisions

28. Conflict between partners can be healthy and can be resolved

29. Skills that families develop overtime can enhance a program's effectiveness (e.g., by hiring veteran parents to help new parents and to help staff maintain or enhance their sensitivity)

30. Professionals need a supportive, open, creative work environment

31. Families bring to the partnership knowledge and information that is reliable and valuable

Summary of Validated Items

The items validated as recommended practice include family participation in their child's individual program by sharing information with staff, participation in hiring and evaluation of staff, participation in training professionals and paraprofessionals on a preservice and inservice basis, participation in state level policy development, and serving as a veteran parent in providing support and information to a new parent. Such acceptance shows the commitment to families achieving equality in the system as decision makers and leaders for their own child and family and for other children and families. Other items reflect a commitment to families having options for their involvement or noninvolvement in different parts of the system (e.g., the family is able to determine the pace of service delivery, family support services are available as requested by the family, and natural community settings are developed as an option for early intervention). There is not one right way to participate; there are as many ways as there are families.

In the Program advising/policy making component, the need to provide financial remuneration to parents for their expertise, time and expenses was supported. Family members' ability to participate in all levels of policy and procedure development was also supported. The need to unscramble the "alphabet soup" which colors our professional language and provide family friendly definitions of terms was also recognized.

In the Staff hiring, training evaluation component, the family's role in staff/program evaluation received acceptance. Involvement in both developing evaluation instruments and formulating conclusions based on the results was recognized. Involvement in the training of new staff and ongoing staff development activities was also supported.

In the Family-to-Family support component, recommended practices include having this type of support as an ongoing part of the early intervention system. The need to link families to natural community supports was highlighted.

In the Intervention component, the family's role in determining the place of service delivery and the pace of service delivery was recognized. The need to provide options to families and to make the options they develop work was also supported.

In the Interagency collaboration-Meetings, evaluation, implementation component, the need to provide information to families about the "process" so that they can be contributing team members was recognized, as was their role in evaluating our success in interagency collaboration. Using the interagency process to increase typical community settings available for children with special needs was also supported.

In the Legislative issues component, the need for families to receive information about their legal rights and due process in their native language was widely supported. Also recognized was the need to support individual family's decisions about whether to become involved in the political action process.

In the Advocacy component, the need to join our efforts with those of regular early childhood educators and supports was recognized. The family's role in determining what issues should receive the focus of advocacy groups was also supported. Professionals recognized their responsibility to tell families when they could not advocate for issues identified by the family.

In the Procedural safeguard development component, a family's right to choose alternative treatments in non-life threatening situations was supported. Also supported as recommended practice was the use of an independent mediator if program and family are in conflict.

In the Leadership training opportunities for parents component, the need for the early intervention "community" to coordinate its efforts with parent information and training groups was accepted as recommended practice. Also recommended was the funding of annual, formal leadership training activities for families by the State lead agency and Interagency Coordinating Council for Early Intervention.

Conclusion

Overall, the validation process has confirmed a change in how we as an early intervention community view family participation. We recognize that the involvement of families is more than giving advise about how to interact with/raise their young children with special needs. Rather family participation is the creation of a collaborative partnership based on equality, trust, and mutual respect. Families are truly equals in this partnership. In the words of Blanca Elizarraraz, a mother from East Los Angeles, when describing her relationship with professionals:

> We're building a team that believes in each other, respects each other, trusts each other, and most of all values each other. We have formed "partnerships". We are partners who are providing a voice in the system; a voice we envision to be the true spirit of PL 99-457. We stand side by side advocating for the inclusion of all children with special needs in all areas of our lives. We advocate for change in a system which traditionally did not accept parents as key players on the "team". We advocate for services to be offered which reflect a family's needs and not just what's available. This is one heck of a team we are building! I'm proud of my partners and I know I can speak on their behalf, because we share a "vision"--that families will be accepted as effective members of the team.

References

Garwood, S. G. & Sheehan, R. (1989). Designing a comprehensive early intervention system: The challenge of PL 99-457. Austin, TX: Pro-Ed, Inc.

Hanson, M. J. & Lynch, E. W. (1992). Family diversity: Implications for policy and practice, Topics in Early Childhood Special Education, 12 (3), 283-306.

Vincent, L. J. & Salisbury, C. (1988). Changing economic and social influences on family involvement. Topics in Early Childhood Special Education, 8 (1), 48-59.

Vincent, L. J., Salisbury, C., Strain, P., McCormick, C., & Tessier, A. (1990). A behavioral-ecological approach to early intervention: Focus on cultural diversity. In S. J. Meisels & J. P. Shonkoff (Eds), Handbook of early childhood intervention (pp. 173-195). Cambridge: Cambridge University Press.

DEC Recommended Practices
Family Participation

Families are equal members in and can take part in all aspects of early intervention systems. This includes participation in all aspects of their child's care and all levels of decision making.

Program Advising/Policy Making

FP1. Family members receive payment for their expertise, time, and expenses while participating on councils, committees, and other aspects of early intervention policy/planning.

FP2. Meetings occur at times and locations that allow family members to participate.

FP3. Programs specify in writing, in an understandable manner, the roles of family members in program advising.

FP4. Program advising and policy making activities include members from more than one family.

FP5. Family members participate in the entire policy and procedures development process (from conceptualization through public comment and revision).

FP6. Families have the opportunity to develop policy making skills if they choose through mentoring and or training.

FP7. When it is necessary to use terminology (words or phrases) that are not familiar to family members, professionals explain the meaning of the terms in family-friendly language and provide written descriptions.

Staff Hiring, Training, Evaluation

FP8. Family members participate in and, if they choose, are paid for: developing job descriptions, advertising for positions, reviewing applications, interviewing candidates, selecting person for the job, conducting orientation activities for new staff, and evaluating staff.

FP9. Families may participate in a variety of roles in staff training: planner, needs assessor, deliverer, participant and evaluator.

FP10. Programs involve family members in gathering evaluative data and input from other families.

FP11. Evaluative feedback from and decision making with family members produces program changes, development, and expansion.

FP12. Family members help develop evaluation tools.

FP13. Family members have a role in the process of formulating conclusions and implications of evaluation data and in disseminating the results.

Family-to-Family Support

FP15. Family support services (respite, advocacy, parent-to-parent networking) are available as requested by the family.

FP16. Program personnel/staff introduce new families to other families in the program.

FP17. Family to family support services create an atmosphere which supports exchange of information among families.

FP18. Linkages to natural community supports for families are built and encouraged.

FP19. Support groups can include extended family members and other family support network members if a family chooses.

Intervention

FP20. Natural community settings are developed and accessible as an option for early intervention.

FP21. Family concerns, priorities, and preferred resources have priority in the determination of the instructional setting.

FP22. Program staff provide information to families about using intervention strategies across settings.

FP23. Families receive information when they ask for it in a way that is meaningful to them.

FP24. Families determine the pace of service delivery (e.g., to change intensity of child and family participation as needed to meet the family's needs).

FP25. Dreams and visions for the future expressed by families are encouraged and supported.

FP26. Families can initiate program monitoring activities if they choose.

FP27. Program staff explain methods of monitoring progress to families and offer options for modes of monitoring.

FP28. Families are asked to monitor progress and satisfaction to the extent they feel comfortable.

FP29. Essential supports such as child care and transportation are available so that families can participate in all levels of early intervention.

Interagency Collaboration-Meetings, Evaluation, Implementation

FP30. Families are included on all interagency teams and groups, throughout all phases of the effort.

FP31. Families are provided the opportunity and support to develop a handbook which helps them and subsequent parents through the "agency process."

FP32. Families are asked on an ongoing and systematic basis to provide feedback on the interagency collaboration process.

FP33. Agencies, with the help of families, develop one form which will be acceptable to all for intake, the IFSP/IEP, and monitoring.

FP34. Public awareness efforts are targeted at typical community settings to expand their availability to families of children with disabilities.

Legislative Issues

FP35. A mechanism exists to inform families about the importance of legislative involvement.

FP36. Families receive information in language they prefer and understand about the laws that support services to their children and themselves.

FP37. Professionals respect family members' decisions to become involved, or not involved, in political action.

Advocacy

FP38. Advocacy groups to support regular early childhood services include the concerns of children with special needs and their families.

FP39. Families participate equally (with professionals) in determining issues that are targeted for advocacy efforts by a program.

FP40. Professionals or agencies inform family members when they can not advocate for issues identified by families because of professional conflict.

FP41. Programs provide families with information on their State's advocacy services and organizations.

FP42. Veteran families support new families as they begin advocacy efforts.

Procedural Safeguard Development

FP43. Programs have clearly specified procedures for recourse/redress of grievances.

FP44. A mediator, independent from the program, participates in grievance procedures if they cannot be settled by the family members and the program.

FP45. Families may make decisions to use alternative services, programs, and methods unless they jeopardize their child's life.

Leadership Training Opportunities for Parents

FP46. Intervention programs coordinate training opportunities for families with parent training groups funded to provide such training as well as with other community training opportunities.

FP47. Families receive parent-directed newsletters and literature.

FP48. Programs provide support, financially if necessary, for families to attend local, state and national level meetings.

FP49. The program provides families with options for training opportunities, times, and methods from which to choose.

FP50. State lead agencies and ICCs fund an annual, formal leadership training for family members.

IFSPs and IEPs

Vicki Turbiville, Ann Turnbull, Corinne Garland, and Ilene Lee

The principles which guided the development of indicators for recommended practice for the IFSP and IEP are presented in the figure on the next page. The primary guiding principles for the development of the IFSP and IEP indicators were that 1.) the family is the decision maker in the process and 2.) that the process is critical.

The Family as the Decision-maker

The recommended practice indicators are based on the family's prerogative to be the ultimate decision maker. This does not mean that the family must make all decisions. It means that the family may choose the extent to which they wish to do the decision making. Families may choose to make all of the decisions or none of them; or families may choose to make decisions about some parts of the plan while having the service providers make decisions about other parts. The key here is that the family defines its own decision making role. This view of decision-making is reflected throughout the list of indicators. Item I4, on the selection of the service provider from a pool of providers, item I19 on the release of information, and item I35 on the selection of the service setting are examples of items that are based on the principle that families are the primary decision makers for themselves and for their children.

Members of the working group for this strand were: Harriett Able-Boone, Bill Brown, Carole Brown, Ruth Cook, Rosalyn Darling, Donna DeStefano, Larry Edelman, Melodie Friedebach, Pat Grosz, Shelley Heekin, Roxanne Kaufman, Mary McGonigel, Melody Anne Martin, Phyllis Mayfield, and Susan Walter.

Fig. 1

Recommended Practice Indicators for IEPs & IFSPs

Guiding Principles

- Family as decisionmakers
- Importance of the process

Other Principles for Development of Recommended Practice Indicators

- a belief in the collaboration among families and service providers
- a desire to eliminate the redundancy and bureaucracy in the process
- expectation of positive, growth-enhancing opportunities for all members
- a strong priority for quality, inclusive services
- vision of choices for families in the sources and delivery of services

Components for Indicators

- Teams should be broadly constituted and members prepared for their roles. Ex. I13, I10
- The process of IFSP/IEP development and for the selection of service coordinator should be individualized. Ex. I4, I5, I20
- The documents should be individualized and reflect the process used in their development. Ex. I14, I15, I33
- The documents are dynamic and responsive to changes in child and family. Ex. I20, I32
- The documents belong to the family. Ex. I19, I25
- Evaluation and monitoring should be vehicles for constant improvement of services. Ex. I36-I41

The Importance of the Process

The importance of the process is the second primary guiding principle for the IFSP and IEP indicators. The IFSP and IEP process should be one which is supportive and inclusive of all the team members: family members, service providers, and others involved in the development of the plan. The plan itself, the IFSP or IEP document, is of secondary importance to the process that the team uses in developing it. The ideal process is one which uses the skills and expertise of each participant and facilitates trustful, respectful collaboration among all members of the IFSP or IEP team. The indicators reflect this concept of recommended practice. Item I3 addressing the relationship with families, item I21 on the communication between team members, and item I37 on the monitoring of IFSPs and IEPs reflect the concerns of the group that the process is as important, if not more important, than the resulting IFSP or IEP documents.

Other Principles Guiding the Development of the IFSP and IEP Indicators

Other principles were also used in the development of the recommended practice indicators. These include a) a belief in collaboration among families and service providers; b) a desire to eliminate the redundancy and bureaucracy in the process; c) an expectation of positive, growth enhancing opportunities for all team members; d) a strong preference for quality, inclusive services; and e) a vision of choices for families in the sources and delivery of those services.

These principles are consistent with the early intervention literature. Summers et al. (1990) found that families and service providers wanted early intervention services to be informal processes, responsive to their preferences, and supportive of the family as a whole.

Similarly, Able-Boone, Sandall, Stevens and Fredrick (1992) reported family preferences for informal approaches which were directed at family selected issues. In addition, families expressed a preference for a positive interactional style and relationship when describing their preferred service provider (Knafl, Breitmayer, Gallo, & Zoeller, 1992).

The Six Components for IFSP and IEP Indicators

IFSP and IEP Teams Should Be Broadly Constituted and Team Members Should Be Prepared For Their Roles.

This component includes statements endorsing appropriate interagency and interdisciplinary participation, emphasizing family participation and decision making, and supporting the need for information regarding IFSP and IEP development and safeguards for family members and service providers on the IFSP or IEP teams. Often in current practice, teams are made up of a set group of participants who are primarily service providers or other professionals. The indicators reflect the importance of moving toward teams that are selected in collaboration with the family and include, if they desire, members of their network of friends and representation from any service agencies or community groups which might be helpful in the process. Several of the recommended practice indicators for this component address the family's selection of the team membership, such as items I13 and I11.

IFSP and IEP Development and Selection of the Service Coordinator Should Be Individualized.

Options for the selection of the service coordinator should include family members as well as service providers or independent service coordinators. Indicators for this component address procedures, timing, team membership and the inclusion of information on the IFSP or IEP. When teams make only one service coordinator available, develop documents without family collaboration, or routinely schedule IFSPs or IEPs according to the calendar rather than the changes in the child or family, they have adopted procedures that are not consistent with recommended practice. Items such as I4 and I5, which address the selection of the service coordinator, and items I20 and I24, on the development of the documents, were developed as indicators of the individualization desired during the development of the IFSP and IEP.

IFSP or IEP Documents Should Also Be Individualized and Reflect the Individualized Process Used in Their Development

Both IFSPs and IEPs should contain only information that families want included and that would be helpful in obtaining services and in addressing other family priorities. In particular, outcomes on the IFSPs and goals and objectives on the IEPs should reflect family preferences. Goals and objectives developed solely by an individual service provider should be replaced by goals and objectives based on the insights of all team members and selected based on the family's values and preferences. Examples of this are items I14, I15 and I33, which describe the options families have in decision-making and in the inclusion of their priorities.

Documents Must Be Dynamic and Responsive to Changes in the Child and Family

Both the IFSP and the IEP must be flexible enough to reflect the expected and unexpected changes in children and their families. Indicators of responsiveness to change describe the ongoing and dynamic nature of the IFSP and IEP as well as procedures for updating and revising the IFSP and IEP in ways that are responsive to family preferences.

Recommended practice also includes expectations for collaboration and efficient implementation of services. Indicators from this subset include those which describe the process of revisions (I20) and the individualization of progress toward outcomes (I32).

Documents Belong to the Family

IEPs, sometimes IFSPs, have historically been "owned" by the agency; the original was often filed away somewhere and kept under lock and key. It is recommended that the original copy of the document be given to the family. The family would then decide how, and if, the document would be shared with others. Laws of confidentiality protect families from unauthorized release of family or child information. Recommended practice indicators support the spirit, as well as the letter of the law. Indicators from this component include those addressing the release of the information, including the IFSP or IEP, and the confidentiality of information (I19 and I25).

Evaluation and Monitoring of the Implementation of the IFSP and IEP Should be a Vehicle for the Constant Improvement of Services

The indicators in this component reflect not only concerns for providing quality services for each individual child and his or her family, but also a concern for the quality of services for the broader community of children with special needs and their families. The evaluation and monitoring of services should not be an end, but a means to improving programs and practices. Indicators from this subset include not only those for monitoring of individual services (I36), but ones which support advocacy for all children with special needs and their families. Indicators from this component include all of those under State and Local Monitoring as well as those which address service gaps and advocacy in general.

Conclusion

The recommended practice indicators in this document reflect incremental changes in the way IFSPs are developed in current practice (Krauss, 1990). Many of the practices extend and refine practices currently being used by programs for infants and toddlers. On the other hand, these same practices may be radical changes in the way IEPs have been developed. It is recommended that IEPs become more family-centered rather than child- or school-centered, reflecting family priorities rather than only child or school priorities. More opportunities for families to participate in decision making should be provided in order to be consistent with recommended practices.

References

Able-Boone, H., Sandall, S.R., Stevens, E. & Fredrick, L.L. (1992). Family support resources and needs: How early intervention can make a difference. Infant-Toddler Intervention: The Transdisciplinary Journal, 2(2), 93-192.

Knafl, K., Breitmayer, B., Gallo, A., Zoeller, L. (1992). Parents' views of health care providers: An exploration of the components of a positive working relationship. Children's Health Care, 21(2), 90-95.

Krauss, M.W. (1990). New precedent in family policy: Individualized family service plans. Exceptional Children, 56(5), 388-395.

Summers, J.A., Dell'Oliver, C., Turnbull, A.P., Benson, H.A., Santelli, B., Campbell, M. & Siegal-Causey, E. (1990). Examining the individualized family service plan process: What are family and practitioner preferences? Topics in Early Childhood Special Education, 10(1), 78-99.

DEC Recommended Practices
IFSPs/IEPs

Best practice indicators are based on the assumption that parents or legal guardians have the ultimate responsibility for decisions regarding the IFSP/IEP process.

IFSP/IEP Process

I1. The IFSP/IEP process is ongoing, dynamic, and individualized.

I2. As an initial step, the person(s) responsible for the development of the IFSP/IEP clearly describe to families the IFSP/IEP process, the rights that families have during the process, and the role of the service coordinator in the process.

I3. A supportive and mutually respectful relationship with families occurs from the time of initial contact with families.

I4. Each family has the opportunity to select from among the pool of available service coordinators the person whose skills and resources most closely match the needs and preferences of the family.

I5. Families have the option to have a family member serve as the service coordinator or co-service coordinator and to receive adequate pay for that work.

I6. In initial IFSP/IEPs when families are not familiar with any of the people who are available to serve as service coordinator, they may ask professional team members to recommend the service coordinator.

I7. Families may request a change in the service coordinator at any time and have that request honored if resources allow.

I8. State and local agencies provide competency-based training to ensure that the service coordinator appropriately fulfills roles.

I9. A system for training service coordinators also includes training family members if they want to participate.

I10. Training in service coordination includes methods to help family members identify informal supports.

I11. The person responsible for coordinating the development of the IFSP/IEP determines with the family the persons to be included on the IFSP/IEP team and, with family authorization, ensures participation of all relevant team members.

I12. Families may select as other team members persons who provide emotional support and practical assistance to the family, including service providers, friends, and families of other children with disabilities.

I13. With the consent of the family, the team may also include representatives of agencies and community programs that have previously served, or are likely to serve, the child or family.

I14. Families may choose: a family-directed process in which they have a leadership role; a collaborative process in which the family shares equal decision-making responsibility with other team members; or a process that delegates decisioning-making to other members of the team.

I15. Each family will have the opportunity to select or change the nature of their role in decision-making for each issue in question.

I16. Families receive individualized support and information so that they can participate in the process in the ways they have chosen. Other team members adjust their roles in response to family preferences.

I17. Families are invited to participate in any team discussion of their child or family.

I18. Families receive complete copies of all reports concerning them and their children, and team members offer assistance, when appropriate, in interpreting those reports.

I19. Families decide what information they wish to share with the team.

I20. Team members base decisions pertaining to updating and revising IFSP/IEP's on family preferences, assessment results, and newly- emerging child information.

I21. All communications, actions, and written statements of team members reflect their respect for one another.

I22. All team members are honest with each other.

I23. All team members recognize the critical role of emotional support and provide this support to other team members.

I24. The IFSP/IEP meetings and documents contain jargon-free communication and include explanation of technical information when necessary.

I25. The IFSP/IEP document includes only and all the information the family wants included.

I26. Professional members of the team are knowledgeable about laws, policies, and recommended practice for the development, implementation, and monitoring of IFSP/IEP's.

I27. Families are given the opportunity to receive information about current recommended practices related to the IFSP/IEP.

I28. Professional members of the team actively advocate for the full rights of the child and family.

I29. Team members keep policy makers informed of gaps in community services.

I30. Agencies allow sufficient time for their team members to work in ways that are consistent with recommended practice.

I31. Team members should ensure that meeting times and locations are convenient for, and accessible to, the family members of the team.

I32. Team members individualize criteria for assessing progress toward outcomes.

I33. Family-initiated outcomes, goals, and objectives are given priority in the development of the IFSP/IEP.

I34. Persons responsible for coordinating the development of the IFSP/IEP discuss with families all options for the range of service settings and assist families in considering the advantages and disadvantages of each.

I35. Families choose the setting for each service that is consistent with their preferences.

State and Local Monitoring

I36. State and local monitoring teams determine the degree to which outcomes for children and families have been achieved.

I37. State and local monitoring teams determine the degree to which families are satisfied with the IFSP/IEP process and document.

I38. State and local teams obtain information from families whose children are in early intervention programs, from professionals providing those services, and from professionals providing other services to these families and their children as a part of the monitoring process.

I39. State and local monitoring teams are made up of equal numbers of family members and professionals.

I40. Monitoring practices protect family confidentiality.

I41. State and local monitoring teams clearly document and report service gaps and scarce resources.

Service Delivery Models

R. A. McWilliam and Phillip S. Strain

Service delivery models consist of the overall pattern and location of interventions for young children with disabilities or at risk for disabilities and their families. The impetus for identifying recommended practice in service delivery was, in the words of the Victorian statesman and man of letters Viscount Morley of Blackburn (1887), "It is not enough to do good; one must do it in the right way" (p.50). The recommended practice indicators for service delivery models are organized by common early intervention settings: homes, centers, clinics, and hospitals. A number of practices are grouped together, however, because they should be employed in all settings.

Principles

Five general principles guided the selection of best practice indicators: least restrictive environment, family-centered services, transdisciplinary service delivery, inclusion of both empirical and value-driven practices, and inclusion of both developmentally and individually appropriate practices.

Least Restrictive and Most Natural Environment

Optimal services are provided in a way that does not unnecessarily restrict opportunities for children and families. The language in the Individuals with Disabilities Education Act (PL 99-457) states that children should be placed in the least restrictive

---

Members of the working group for this strand were: Susan Bramblett, Bill Brown, Judy Carta, Mary France Hanline, Shelley Heekin, Chris Kaminsky, Phyllis Mayfield, Barbara Schwartz, M'Lisa Shelden, Diane Turner, Gayle Underdown, Georgia Woodward, and Priscilla Stanton Wolfe.

environment or the most natural setting. This is not simply a placement issue, however; the method of providing services, regardless of setting, should allow for maximum participation in the "mainstream." Despite the limitations that a disability might place on a child's and family's ability to lead an ordinary existence, good services promote the potential for "normal" rather than "disabled" routines. Hence, indicators are included which base the nature, delivery, and scope of intervention upon activities of daily living (SDM11); providing fun environments that stimulate children's initiations, choices, and engagement with the social and material ecology (SDM24); preparing children for the next, less restrictive environment (SDM31); and providing neonatal intensive care unit environments that are appropriate for the neurological status and developmental level of the child (SDM34).

Family-Centered

A second undergirding principle was that service delivery models should (a) recognize that the child is part of a family unit; (b) be responsive to the family's priorities, concerns, and needs; and (c) allow the family to participate in early intervention with their child as much as they desire (Bailey, McWilliam, & Winton, 1992). Services that previously might have been geared almost exclusively toward children must have the flexibility, expertise, and resources to meet the needs of other members of the family, as those needs relate to the child's development (Public Law 99-457). It is strongly recommended that service providers rethink the concept of "parent involvement" (Foster, Berger, & McLean, 1981). "Getting parents more involved in their child's education" presumes that families are not already "involved" and that the opportunities for parent involvement (e.g., parent education classes) are worthwhile for individual families, compared to their competing priorities.[1] Thus the indicators include giving families choices in the nature of services (SDM3), matching the level of intensity desired by the family (SDM13), providing center-based services close to where families live (SDM16), encouraging and supporting families to be with children during clinic-based procedures (SDM28), and giving families opportunities to participate in hospital-based services (SDM35).

Transdisciplinary

One model for increasing the opportunity for family members to make meaningful decisions and participate in early intervention as much as they want is transdisciplinary service delivery (Raver, 1991). This model involves team members' sharing roles: each specialist helps other members to acquire skills related to the specialist's area of expertise. This requires both role release (accepting that others can do what the specialist was trained specifically to do) and role acceptance (accepting that one's job can include more than what one was specifically trained to do). Transdisciplinary service delivery encourages a whole-child and whole-family approach, allows for the efficient use of the primary interventionists (i.e., the child and family do not always need to see many different specialists), and fosters skill development in interventionists. The list of indicators includes only three that are somewhat related to this model: employing pull-out services when routine, activity-based options have failed (SDM20); providing noncategorical center-based services (SDM21); and consultants' communicating regularly with center-based staff and families (SDM26). This probably underrepresents the importance of transdisciplinary service delivery.

---

[1] Although we agreed with the Chinese proverb that it is better to light a candle than to curse the darkness, the need to suggest recommended practice has been clear because of our experiences with services that have violated our values, evidence from research, or families' desires. It is sometime useful, therefore, to articulate what we are trying to get away from as well as what we are aiming towards.

Was such a small number of indicators addressing transdisciplinary service delivery included because they would be too controversial? Certainly, many specialists and their professional associations have stated reservations about the idea that their services could be supplanted by other professionals' taking on some of the roles. The most threatening argument against transdisciplinary service delivery is that it is illegal to practice without a license or teach without a certificate. This reveals a lack of understanding about the judicious use of this model. After all, specialists almost always give families suggestions about how they can do "speech-language therapy," "occupational therapy," "physical therapy," or "special education" with their children. At a time when there are enormous shortages of specialized personnel (Yoder, Coleman, & Gallagher, 1990), when more than ever the importance of integrating interventions across developmental domains is recognized, and when early intervention staff roles are being redefined (LeLaurin, 1992), we probably should have included more indicators directly addressing transdisciplinary service delivery.

Empirically and Value Driven

For 20 years or so, there has been a steady output of research related to young children with disabilities and their families. Some of these studies are better than others; the most believable findings are those that have been replicated. From this body of work, it was possible to include indicators that are empirically sound, such as adult:children ratios that maximize safety, health, and promotion of identified goals (SDM19); barrier-free center environments (SDM22); center and environments to promote high levels of engagement

(SDM25). Interestingly, most of the research-based indicators are associated with environments.

A number of indicators address the importance of measuring the effectiveness of services. Most researchers and interventionists would agree that the evaluation of services is haphazard at best. Researchers often find they cannot use the existing data collected by service providers; many of the decisions, both at the individual child and family level and at the program level, are based as much on intuition as on data. More accountable systems are necessary, but they need to be flexible enough to allow for adjustments in families' priorities, children's development, personnel availability, and program resources. Indicators supporting the importance of data collection include measuring effectiveness and communicating results to the family (SDM2); monitoring service delivery to insure that agreed-upon procedures and outcomes are achieved in a timely fashion (SDM4); monitoring interventions frequently, making changes in programming as needed (SDM8); and continuing clinic-based services only as long as it takes to reach prearranged goals (SDM29).

The importance of unproven but highly valued practices must also be acknowledged. Many of these "value-based" indicators emerged from families' and professionals' bad experiences; they stem from a desire to guide services in positive directions and away from practices that violate currently held beliefs and priorities. Considering the enormous diversity of families in early intervention, we cannot be sure that we truly represent all families' values. The most important safeguard against a paternalistic approach, however, is to individualize practices for each child and family. The canon of individualization characterizes early intervention and distinguishes it from other early childhood services; it reflects a strongly held value in our field. Indicators guided by values include having someone available to speak the family's preferred language (SDM6); basing communication with family members upon principles of mutual respect, caring, and sensitivity (SDM14); making center environments safe and clean (SDM15); employing clinic-based services only when they are identified as the least restrictive option (SDM27); and giving opportunities for the family to have access to medical decision-makers (SDM36).

Developmentally and Individually Appropriate Practice

At the time these indicators are being delineated by DEC, the field of early intervention is undergoing examination from within and without as to the developmental appropriateness of its practices. "Developmentally appropriate practice" (DAP) is a term coined by the National Association for the Education of Young Children to refer to educational methods that promote children's self-initiated learning (Bredekamp, 1987). Early childhood special education (ECSE) has been criticized for being too structured, too adult-directed. The strengths of both DAP and the traditional ECSE emphasis on individualizaton are recognized through indicators such as individualization of services in response to children's characteristics, preferences, interests, abilities, and health status (SDM7) and curricula that are unbiased and nondiscriminatory around issues of disability, sex, race, religion, and ethnic/cultural origin (SDM17). As the research base for DAP increases, it is likely that additional recommended practices will be identified.

Some of the recommended practices for service delivery models are stated directly and with no apology [e.g., "Professionals keep appointments in a timely fashion," (SDM33)]. Some are possibly controversial [e.g., "Programs employ clinic-based services only when they are identified as the least restrictive option," (SDM27)]. Many, however, will be considered platitudinous; they are little more than common sense and are eminently socially acceptable [e.g., "Environments are safe and clean," (SDM15)]. These have been included however because, unfortunately, they are not universally practiced. Our hope is that these indicators will generate questions such as the following:

--Do we really deliver services this way?

--Could we do this more or better?

--Do we do this consistently?

References

Bailey, D. B., McWilliam, P.J., & Winton, P. J. (1992). Building family-centerd practices in early intervention: A team-based model for change. Infants and Young Children, 5(1), 73-82.

Bredekamp, S. (1987). Developmentally appropriate practice in early childhood programs serving children from birth through age 8: Expanded edition. Washington, DC: National Association for the Education of Young Children.

Foster, M., Berger, M., & McLean, M. (1981). Rethinking a good idea: A reassessment of parent involvement. Topics in Early Childhood Special Education, 1(3), 55-656

LeLaurin, K. (1992). Infant and toddler models of service delivery: Are they detrimental for some children and families? Topics in Early Childhood Special Education, 12(1), 82-104.

Morley, J. (1887). Aphorisms: An address delivered before the Edinburgh Philosophical Institution. London: Macmillan.

Raver, S. A. (1991). Strategies for teaching at-risk and handicapped infants and toddlers: A transdisciplinary approach. New York: Macmillan.

Yoder, D. E., Coleman, P. P., & Gallagher, J. J. (1990). Personnel needs: Allied health personnel meeting the demands of Part H, P. L. 99-457. Unpublished manuscript. Carolina Institute for Child and Family Policy, University of North Carolina, Chapel Hill, NC.

DEC Recommended Practices
Service Delivery Models

Indicators Across All Models of Service Delivery

SDM1. Program staff coordinate early intervention services with all other modes of service delivery available to and needed by the child and family.

SDM2. Services include a measure of effectiveness and results should be communicated in a timely fashion to the family.

SDM3. The nature of services provided are based upon families' informed selection from an array of viable options.

SDM4. The early intervention program frequently monitors delivery of services to insure that agreed upon procedures and outcomes are achieved in a timely fashion.

SDM5. Programs are staffed by personnel who have received competency-based training with children of the age being served.

SDM6. Someone in the program or immediately available to the program speaks the family's preferred language.

SDM7. Program staff individualize services in response to children's characteristics, preferences, interests, abilities, and health status.

SDM8. Staff monitor interventions frequently, and make changes in programming as needed.

SDM9. Staff employ a variety of strategies and interventions to address individual child and family needs.

SDM10. Staff design services to allay children's fears and anxieties regarding separation, medical interventions, and other intervention related issues.

Home-Based

SDM11. Staff base the nature, delivery, and scope of intervention upon activities of daily living (e.g., bathing, feeding, play, bedtime, etc.).

SDM12. Intervention includes all family members (family members being defined by the family) who wish to be involved.

SDM13. The level of intensity and range of services match the level of need identified by the family.

SDM14. Staff base their communication with family members upon principles of mutual respect, caring and sensitivity.

Center-Based

SDM15. Environments are safe and clean.

SDM16. The setting is physically accessible to families (i.e., within a short distance to allow for regular contact).

SDM17. Services insure an unbiased, nondiscriminatory curriculum around issues of disability, sex, race, religion, and ethnic/cultural origin.

SDM18. Service programs are well integrated within the administrative unit with which they are affiliated.

SDM19. The ratio of adult staff to children maximizes safety, health, and promotion of identified goals.

SDM20. Programs employ pull-out services (e.g., for ECSE, OT, PT, Speech) only when routine, activity-based options for services have failed to meet identified needs.

SDM21. Services for children with disabilities are noncategorical.

SDM22. Environments are barrier free.

SDM23. Environments include an adequate quantity and variety of toys and materials suitable for ages and needs of children enrolled.

SDM24. Environments are fun: they stimulate children's initiations, choices, and engagement with the social and material ecology.

SDM25. Staff arrange environments to promote high levels of engagement for children with diverse abilities.

SDM26. Personnel delivering related or consulting services (OT, PT, Speech, ECSE) communicate regularly with teaching staff and families.

Clinic-Based

SDM27. Programs employ clinic-based services only when they are identified as the least restrictive option.

SDM28. Professionals encourage and provide support for families to be with children during interventions/procedures.

SDM29. Services in clinics continue only as long as it takes to reach prearranged goals.

SDM30. Clinics include comfortable care for family members (e.g., on-site daycare, sleep-in options).

SDM31. Clinic services prepare children for the next, less restrictive environment.

SDM32. All clinic services are available regardless of family income.

SDM33. Professionals keep appointments in a timely fashion.

Hospital-Based

SDM34. Neonatal intensive care units provide environments (stimulation levels, schedules, etc.) appropriate for the neurological status and developmental level of the child.

SDM35. Hospital-based services provide ongoing opportunities for family participation.

SDM36. Hospital-based services include opportunities for the family to have access to medical decision-makers.

SDM37. Program staff delineate and communicate to families the roles of decision-makers in hospital-based services.

SDM38. Medical personnel in hospital-based services understand recommended practices in early intervention.

SDM39. Hospital-based services include referrals appropriate for individualized child and family outcomes.

General Curriculum and Intervention Strategies

Mark Wolery and Diane Sainato

The indicators of recommended practice in the area of general curriculum and intervention strategies are based on several foundations, including values shared in the field, logic, experience, and research. This set of indicators is divided into four subsets: (a) the broad outcomes that should occur from using appropriate curriculum and instructional strategies, (b) the issues teams should consider in developing and making selections about which strategies to use, (c) the issues teams should consider in making adjustments to the curricular strategies that are used, and (d) the types of strategies that are effective and should be a part of every early childhood educator's repertoire. Each of these four groups of indicators are discussed in this section. First, however, definitions of "curriculum" and "intervention strategies" are provided, and the assumptions on which the indicators are based are listed.

Definition of Curriculum and Intervention Strategies

Although many definitions of curriculum exist, most individuals agree that curriculum includes at least three components (Dunst, 1981; Wolery & Fleming, 1993). The first component is the content (i.e., behaviors, skills, abilities, and patterns of interacting) that is taught. In this section, the term "skills" is used to include all behaviors, abilities, and patterns of interacting. In the case of infants, toddlers, and preschoolers with developmental

---

Members of the working group for this strand include: Marlene Deer, Donna DeStefano, Wendy Finger, Daniel LeFebvre, Toni Linder, Diane M. Sainato, Lynn Moore, Susan Remelius, Diane Ross, and Kay Timme.

delays and disabilities, the content is quite broad and certainly is different from what many individuals think of when talking about curriculum content for school-age children. The content should include a broad array of developmental and other skills that may be important for many infants, toddlers, and preschoolers, and it should include a sequence of those skills for instruction. The second component of the curriculum involves the methods for identifying the content for each individual. Since the content of the curriculum includes many potential skills, some means is needed to identify which skills are important (from the perspective of the family and other team members) for each individual infant or child at a given time. Often this is done through an instructional program planning assessment, and the statement of the skills that teams believe infants and children should learn are the goals or objectives. The third component of the curriculum involves the methods of teaching the identified content to each individual. These methods are the curriculum and intervention strategies and are defined as the things families and others (e.g., teachers) do to help children learn and use the behaviors, skills, abilities, and patterns of interacting that were identified as important for each child. Of course, in early childhood, the intervention strategies are used in various settings (i.e., homes, clinics, child care programs, schools, and the community), are used by different individuals (peers, family members, teachers, therapists), and are often used in the context of the infant/child's ongoing daily activities and routines.

Assumptions of the Recommended Practice Indicators for Curriculum and Intervention Strategies

Several assumptions are implicit in recommended practice in the area of curriculum strategies. First, the experiences infants and children have influence their learning and development. This assumption indicates that children's development is not solely biological, but that it is a result of interactions between a biologically maturing individual and changing environments. Second, the learning and development of infants and children are potentially influenced by all of their experiences, not only those that professionals view as interventions. Thus, the totality of children's experiences, within and outside of the intervention program, potentially influence how they develop and learn. As a result, our interventions must be sensitive to the unique ecologies in which they live and interact. Third, the adults in the infant/child's world can provide experiences that promote or impede development and learning. Thus, some ways of interacting with infants/children, some schedules of daily routines, some organizations of physical environments facilitate development and learning and others do not. Fourth, no defensible reasons exist for allowing infants/children to have experiences that impede their development and learning. As a result, professionals have a responsibility to ensure that the experiences of infants and children are designed to promote, not interfere with, development and learning.

Description of Recommended Practices

As noted above, this set of indicators is divided into four subsets. These are discussed in the following paragraphs.

Outcomes of the Curriculum and Intervention Strategies

To be judged as a recommended practice, an intervention should produce several general outcomes. We list nine outcomes that we believe are defensible, and the adequacy and acceptability of each strategy should be judged against these. The use of any strategy should not result in harm to the infant/child, their family, or their relationship. Harm, as used here, refers to any enduring impact on the infant/child, the family, or their relationship. Harm does not refer to discomfort but to actual interference with a child's development, a family's ability to function, or to the relationship between the child and family. For example, a parent may experience some anxiety about a child's transition from a preschool program to a school-age program. However, while their anxiety can and should be minimized, the transition, in most cases, should not be avoided because of the discomfort they might feel about what the future placement holds. In fact, such discomfort is shared by many families, including those in which the child does not have disabilities.

Intervention strategies also should minimize the extent to which children are dependent upon others and are different from their age-mates. For example, strategies should promote active engagement (participation), initiative (choice making, self-directed behavior), autonomy (individuality and self-sufficiency), and age-appropriate abilities in many normalized contexts and situations. However, in some situations, children should not be expected to be independent, but they should still be allowed to participate. For example, in getting ready for a bath, a 3-year-old child should not be expected to adjust the water to the appropriate temperature, but could be expected to help get ready for the bath (e.g., getting bath toys, assisting in taking off clothing). Thus, while independence, initiative, and autonomy are valued, participation with support and assistance is appropriate in routines where independence is not safe, possible, or practical.

Intervention strategies also should be judged on their ability to cause rapid learning and use of important skills. Thus, strategies should not be used unless children learn the skills being taught. Also, only strategies should be used that result in rapid learning. Such learning often provides feelings of success and mastery, and it saves time for other goals. Finally, strategies should help children use the skills outside of the situations in which they are initially learned. Early interventionists should not be satisfied if children learn new skills; they should only be satisfied if children use those skills when and wherever they are appropriate and needed.

Development and Selection of Intervention Strategies

For many of the skills that infants/children need to learn, several strategies may be effective; therefore, some guidelines are needed for selecting among strategies. Nine general indicators are proposed. Early interventionists should devise strategies that support and promote family values and participation as compared to making excessive demands on families, being inconsistent with their cultural practices and belief systems, and interfering with rather than facilitating their participation with the infant/child and the team. Also, strategies should be selected and developed that are based on, follow the lead of, and are responsive to children's behavior. In selecting strategies, interventionists must consider information from relevant disciplines, the extent to which it can be applied in various relevant settings, the extent to which multiple goals can be addressed in a single activity and the extent to which a balance is established between child- and adult-directed learning. These indicators mean that the intervention strategies should have wide application and promote the types of outcomes mentioned above. Also, strategies should be selected which promote learning in each of its different phases: learning how to do new skills, learning to use those skills smoothly and easily, learning to use those skills after intervention has stopped, and learning to apply the skills when and wherever they are needed. Further, if learning is likely to be equal with more than one strategy, then the one that is most normalized (most similar to that used with typically developing children), least intrusive (allows the most choices for the child and the least restriction of freedoms), and easiest to use should be employed. However, recommended practice does not include using *ineffective* strategies simply because they are normalized, are not intrusive, and are easily implemented.

Adjustments of Intervention Strategies

Because of the complexity of development and the multiple effects of disabilities on it, teams often will not devise perfect intervention plans from the beginning; thus, adjustment to the plan will be required. Also, as infants and children become more developmentally advanced, adjustments may be needed. Three indicators of recommended practice are proposed for determining when to make adjustments in the interventions strategies. These include when the infant/child's needs change, when no change in their skills or performance is noted, and when family members express concern about the need for change. Early interventionists who engage in quality practices constantly monitor the effects of the interventions and often adjust those strategies to increase the probability that learning and development will occur. The nature of the adjustments, however, will vary greatly depending upon the child's abilities, the skills being taught, the contexts in which intervention strategies are being used, and nature of the needed change.

Effective Curricular and Intervention Strategies

In the past two decades, a substantial increase occurred in the number of intervention strategies that have research support. Educators should know about these strategies, know when and how to use them, and know how to make adjustments in their use. Although many strategies exist, ten indicators of recommended practice are presented. These intervention strategies include the appropriate use of materials and space (Bailey & Wolery, 1992), milieu or naturalistic teaching strategies (Kaiser, Yoder, & Keetz, 1992), strategies that involve peers (Odom, McConnell, & McEvoy, 1992), adult responsiveness to child behavior (Bricker & Cripe, 1992; Dunst et al., 1987), response prompting strategies (Wolery, Ault, & Doyle, 1992), differential reinforcement and response shaping (Cooper, Heron, & Heward, 1987), self-management procedures (Barnett & Carey, 1992), and correspondence training (Baer, 1990). Each of these general categories of interventions have many variations, and each has supporting applied research. Thus, early interventionists who engage in recommended practices select and employ a number of different strategies that have been used and tested with other children. It should be noted that recommended practice is not limited to intervention strategies that have been evaluated through research. It also includes devising new, untested strategies for addressing particular needs of individual children in given contexts. However, when interventionists use those new and untested strategies, they engage in systematic methods for evaluating the effectiveness and efficiency of those strategies.

References

Baer, R. (1990). Correspondence training: Review and current issues. Research in Development Disabilities, 11, 379-393.

Bailey, D. B., & Wolery, M. (1992). Teaching infants and preschoolers with disabilities (2nd ed.). New York: MacMillan.

Barnett, D. W., & Carey, K. T. (1992). Designing interventions for preschool learning and behavior problems. San Francisco: Jossey-Bass.

Bricker, D., & Cripe, J. W. (1992). An activity-based approach to early intervention. Baltimore: Paul Brookes.

Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). Applied behavior analysis. Columbus, OH: Merrill.

Dunst, C. J. (1981). Infant learning: A cognitive-linguistic intervention strategy. Allen, TX: Teaching Resources/DLM.

Dunst, C. J., Lesko, J. J., Holbert, K. A., Wilson, L. L., Sharpe, K. L., Liles, R. F. (1987). A systematic approach to infant intervention. Topics in Early Childhood Special Education, 7(2), 19-37.

Kaiser, A. P., Yoder, P. J., & Keetz, A. (1992). Evaluating milieu teaching. In S. F. Warren & J. Reichle (Eds.), Causes and effects of communication and language intervention (pp. 9-47). Baltimore: Paul H. Brookes.

Odom, S. L., McConnell, S. R. & McEvoy, M. A. (1992). Social competence of young children with disabilities: Issues and strategies for intervention. Baltimore: Paul Brookes.

Wolery, M., Ault, M. J., & Doyle, P. M. (1992). Teaching students with moderate and severe disabilities: Use of response prompting strategies. White Plains, NY: Longman.

Wolery, M., & Fleming, L. A. (1993). Implementing individualized curriculum in integrated settings. In C. A. Peck, S. L. Odom, & D. Bricker (Eds.), Integrating young children with disabilities into community programs: From research to implementation (pp. 109-132). Baltimore: Paul H. Brookes.

DEC Recommended Practices
General Curriculum and Intervention Strategies

Curriculum and intervention strategies are derived from and based on: (a) the individual abilities and needs of infants/children, families' preferences, and the cultural context; (b) information obtained from a comprehensive assessment process and (c) the philosophy of the program.

Curriculum and intervention strategies result in:

GC1. No harm to infants/children, families, or their relationship.

GC2. Active engagement of infants/children with objects, people, and events.

GC3. Increased initiative, independence, and autonomy by infants/children across domains.

GC4. Increased ability to function/participate in diverse and less restrictive environments.

GC5. Independent (unprompted) performance of age-appropriate, pro-social behaviors, skills, and interaction patterns.

GC6. Supported or partial participation in routines/activities when independent performance is not possible.

GC7. Acquisition (initial learning) of important values, behaviors, skills, and interaction patterns across domains.

GC8. Generalization, adaptability, application, and utilization of important behaviors, skills, and interaction patterns across relevant contexts.

GC9. Efficient learning (most rapid acquisition) of important goals (behaviors, skills, patterns of interaction).

Curriculum and intervention strategies are developed, selected, and implemented in a manner which:

GC10. Supports and promotes family values and participation.

GC11. Is responsive to infants'/children's interests, preferences, motivation, interactional styles, developmental status, learning histories, cultural variables, and levels of participation.

GC12. Integrates information and strategies from different disciplines.

GC13. Structures learning activities in all relevant environments.

GC14. Establishes a balance between child- and adult-initiated/directed activities.

GC15. Integrates skills from various domains within routine activities in the classroom (i.e., is activity-based).

GC16. Promotes acquisition (initial learning), fluency (proficiency), maintenance (retention), and generalization (application, utilization) of important goals (behaviors, skills, and patterns of interaction).

GC17. Is most natural, normalized, and/or least intrusive, given that the benefits to individual infants'/children's learning are equal.

GC18. Is most parsimonious (simpler/simplest) given that the benefits to individual infants'/children's learning are equal.

Curriculum and intervention strategies are modified and adjusted as needed and in a timely manner based upon:

GC19. The changing needs of individual infants/children and their families.

GC20. Observed and documented performance of infants/children.

GC21. Concerns, opinions, and needs expressed by the family.

Effective curriculum and intervention strategies include:

GC22. Use of materials that have multiple purposes, are adaptable, are varied, and reflect functional skills.

GC23. Milieu strategies (i.e., incidental teaching, mand-model procedure, modeling, and naturalistic time delay) that involve brief interactions between adults and children.

GC24. Peer-mediated strategies (e.g., social interaction training, peer initiation training, peer modeling, peer prompting and reinforcement).

GC25. Adult imitation of infants'/children's play and other behavior.

GC26. Elaboration of infants'/children's behavior by providing models, re-stating the child's vocalizations, suggesting alternatives, and open-ended adult questions.

GC27. Prompting strategies (e.g., constant and progressive time delay, system of least prompts, simultaneous prompting, most to least prompting, graduated guidance) that provide learning opportunities, adult assistance, reinforcement for correct performance, and fading prompt assistance.

GC28. Differential reinforcement that provides children with feedback for desired performance and withholding feedback (e.g., planned ignoring) when desired performance does not occur.

GC29. Response shaping that provides positive reinforcement for progressively more complex performance.

GC30. Self-management procedures that involve teaching children to identify appropriate behavior, evaluate their own performance, direct their performance verbally, and select reinforcement based on an evaluation of their performance.

GC31. Correspondence training, which involves providing children with positive reinforcement for matching what they say they will do (Say-do strategy) or have done (Do-say strategy) with their actual performance.

Interventions to Promote Cognitive Skills

Carl J. Dunst

The eight recommended practice indicators for cognitive intervention specify a number of considerations that need to be addressed when promoting child competence. The indicators have as their bases the assumptions that children are active rather than passive recipients of information; learn about their own capabilities as well as the propensities of others as a result of interventions; and best learn in situations where caregivers are responsive rather than directive during learning episodes.

Cognitive development entails progressive changes in children's acquisition of knowledge and skills, and the use of these competencies in everyday life as a basis of building a repertoire of cognitively-related capabilities. Intervention practices enhance these acquisitions in ways that permit children to adapt to a broad range of demands and challenges in interactions with persons and objects and during differing types of everyday events and daily routines.

Full appreciation of the implications of the cognitive intervention indicators is best understood by differentiating between three sets of terms found in the cognitive intervention literature: learning and development, competence and performance, and elicited and enabling experiences.

Members of the working group for this strand were: Stephen Bagnato, Patti Huttinger, Mary Brady Kovacs, Toni Linder, Gerald Mahoney, Rune Simeonsson, Scott Snyder, Char Ward, Georgia Woodward, and Peggy Yousef.

Learning and Development

Learning may be defined as a "relatively permanent change in behavior which occurs as a result of experience" (Tarpy, 1975, p. 4). To say that learning involves a _permanent change in behavior_, we mean that an addition or modification has occurred that differentiates the child before and after he or she has been exposed to some type of learning experience (Gagne, 1970). To say that learning results from _experience_, we mean exposure to some type of opportunity that directly influences behavior.

Development may be defined as a relatively permanent change in the adaptive processes used to acquire, store, and use information as a result of experience (Dunst, 1981; Rowland & McGuire, 1971). To say that development involves _permanent change in adaptive processes_, we mean that an addition or modification has occurred in the ways in which behavior is organized and manifested (Piaget, 1970; Rowland & McGuire, 1971). In developmental terms, adaptive processes refers to the stage-like changes that permit a child to interact with the environment in a more competent manner.

The difference between learning and development may be understood by the ways in which change is typically measured. Learning is often measured in terms of the frequency, duration, and rate of occurrence of behavior (e.g., the number of times a child says a certain sound or word during a specified period of time or under specified conditions). Development in contrast is generally measured with respect to changes in the way information is acquired and utilized. It is most often assessed with respect to attainments of different levels or stages of functioning representing different cognitive capabilities (e.g., trial and error problem solving vs. planned problem solving).

Based on the distinction made above, the following relationship may be stated: All development involves learning, but not all learning produces development. The implication of this relationship for intervention practices is as follows: the goal of intervention should be promotion of development and not simply enhancement of learning. If learning were the goal of intervention practices, we would likely fool ourselves into believing that a child became more able and competent, when in fact all we would do is have a child do more of the same type or class of behavior at the same level or stage of development. More is not necessarily better unless it results in significant and discernible changes in the ways in which children acquire, process, and employ what they have learned. Significant and discernible changes in knowledge-acquisition and skill-use are major indicators of development growth.

Competence and Performance

Competence may be defined as the achievement and availability of certain levels and forms of functioning, both of which reflect the capacity to acquire, store, and use information in certain ways (Davidson & Sternberg, 1985). The capacity to acquire and utilize information in turn affects the capacity to "call into play" the full range of behaviors that are indicative of the most advanced processes of development of which a child is capable. Stated more simply, competence is the highest form of functioning that a child is capable of at a given point-in-time. To say that a child has achieved a certain level of competence means that he or she has achieved a certain stage of development.

Performance may be defined as the utilization of competence as a result of experiences that require the child to make adaptations to different demands and challenges (Davidson & Sternberg, 1985). Performance is what we use to ascertain that a child has achieved a certain level of competence. Performance factors determine and influence the use of competence in different situations (e.g., parent expectations and beliefs regarding child capabilities) (Siegel, 1985). To say that a child is competent, we mean that he or she can perform the necessary behaviors indicative of certain levels of functioning.

The relationship between competence and performance is both interesting and useful. Optimal performance occurs when learning experiences match the level of competence of the child (Hunt, 1971). That is, a child is most likely to show and maintain interest in learning opportunities as well as benefit from these experiences if learning requires the child to perform behaviors that are at the level of highest development of the child. Experiences below that level tend to bore the child, whereas experiences significantly beyond the child's capabilities become frustrating.

The relationship between competence and performance has at least one major implication for intervention practices: The experiences that are afforded children in early intervention programs must be carefully selected and utilized so that learning matches competence, which in turn optimizes performance and thus promotes development and the capacity to become more capable and competent.

Elicited and Enabling Experiences

All of the above four concepts--learning, development, competence, and performance--have as part of their definitions the notion that environmental experiences are major factors that influence behavior. Until now, any definition or explanation of the term experience has been ignored, yet this is the most important aspect of learning, development, competence, and performance. This is the case because early intervention has as its major presupposition the explicit contention that educational and therapeutic experiences are an essential ingredient for affecting behavior change. However, as was noted before and will be again pointed out, misunderstanding about efficacious and nonefficacious experiences often results in the use of less than optimal learning opportunities. It is, therefore, of considerable benefit to distinguish between elicited and enabling learning opportunities as part of promoting child competence.

The term *elicited experiences* refers to a class of environmental events that evoke behavior from children but which do not produce *permanent changes* in the child's behavior repertoire. As indicated above, a part of the definitions of both learning and development is that permanent behavior change results from experience. As it turns out, a considerable amount of what is done in the name of "early intervention" does not produce permanent behavior change. Stimulation used to evoke attention and other responses from children are perhaps the most frequently used forms of elicited experiences (Dunst, 1984). Consequently, behaviors that must be maintained by external reinforcing consequences are a subclass of elicited experiences because the permanence of the behavior is dependent upon the availability of external reinforcers and are not maintained by self reinforcing influences.

In contrast, *enabling experiences* produce both learning and development. Enabling experiences are opportunities that both strengthen child performance and promote competence by producing permanent changes in behavior. What maintains behavior is not external influences but rather the acquisition of a clear *sense of competence* (self-efficacy) resulting from experiences interacting with the social and nonsocial environment.

The difference between elicited and enabling experiences has one major implication for intervention practices: Whatever experiences are used to promote optimal performance, they must not only result in observable and permanent changes in behavior they must also promote a sense of self-efficacy in the child. For it is the sense of self-efficacy (cognitive efficacy) that is perhaps the most important factor influencing behavior permanency.

Summary

The material briefly reviewed here can be summarized in a way that ties all the notions described above together. First, the major emphasis of intervention practices ought to be promotion of development and not just enhancement of learning since the former encompasses the latter and is likely to have the greatest influences on behavior change. Second, optimal performance will most likely occur when learning experiences match a child's level of competence. To do so will maintain interest and increase the likelihood of further development. Third, optimal development and performance will most likely occur by using enabling experiences that promote competence and a sense of self-efficacy. If early interventionists take development into consideration as the goal of intervention, optimal performance as the target of intervention, and enabling experiences as the method of producing behavior change, the benefits that will be realized are more likely to have long lasting effects.

References

Dunst, C. J. (1981). Infant learning. Allen, TX: DLM Publishers.

Dunst, C. J. (1984). Theoretical bases and pragmatic considerations in infant curriculum construction. In J. Anderson (Ed.), Curricula for high-risk and handicapped infants (pp.13 - 23). Chapel Hill, NC: Technical Assistance Development System.

Davidson, J., & Sternberg, R. (1985). Competence and performance in intellectual development. In E. Neimark, R. DeLisa, & J. Newman (Eds.), Moderators of competence (pp. 43 - 76). Hillsdale, NJ: Erlbaum Publishers.

Gagne, R. (1970). The conditions of learning. New York: Holt, Rinehart, & Winston.

Hunt, J. McV. (1971). Intrinsic motivation and psychological development. In H. Schroder & P. Suedfeld (Eds.)., Personality theory and information processing (pp. 131 - 177). New York: Ronald Press.

Piaget, J. (1970). Piaget's theory. In P. Mussen (Ed.), Carmichael's manual of child psychology (Vol. 1) (pp. 703 - 732). New York: Wiley.

Rowland, G., & McGuire, J. (1971). The mind of man. Englewood Cliffs, NJ: Prentice-Hall.

Siegel, I. (Ed.). (1985) Parental belief systems: The psychological consequences for children. Hillsdale, NJ: Erlbaum.

Tarpy, R. (1975). Basic principles of learning. Glenview, IL: Scott, Foresman and Co.

DEC Recommended Practices
Interventions to Promote Cognitive Skills

Cognitive interventions and curricula are based upon theories and models that specify the progressive changes in children's knowledge, cognitive skill acquisition, and skill use. Cognitive skills cover such diverse capacities as attention, memory, purposeful planning, decision making, communication, discrimination, and idea/competence generation. Intervention practices enhance the acquisition and use of knowledge and cognitive skills that permit social adaptation to a broad range of demands and challenges involving a range of objects, persons, and events.

COG1. Cognitive assessment procedures focus on the identification of persons and environmental factors that promote children's acquisition of cognitive skills and competencies with other people, objects, and events.

COG2. Cognitively-based curricula are based upon processes of human learning that progress from awareness to exploration to inquiry to utilization.

COG3. Cognitively-based curricula enhance children's knowledge about their own capacities as they relate to objects and people in different settings.

COG4. Interventions encourage child-initiated and child-directed learning and mastery of skills in social and nonsocial environments.

COG5. Intervention practices emphasize children's integration of previously and newly acquired knowledge and skills.

COG6. Professionals use a broad range of teaching methods and instructional strategies to enhance engagement in daily routines and activities that match children's developmental abilities and interests.

COG7. Teaching methods emphasize reciprocity and joint-action within the child-caregiver dyad as a primary social context for children to learn cognitive skills.

COG8. Professionals use adaptive and augmentative devices and equipment (when appropriate) to promote acquisition of cognitive skills and competencies by allowing children to actively participate in the environment or learning activity.

Interventions to Promote Communication Skills

Howard Goldstein

Recommended practices for interventions to promote communication skills stem from the premise that intervention agents should be actively involved in teaching young children with special needs to communicate more effectively. Active involvement includes strategies for assessing communication performance, strategies for selecting appropriate intervention goals, as well as strategies for teaching that address those communication goals. The indicators of recommended practice are meant to be as inclusive as possible with respect to: (a) what constitutes "communication" and (b) what places and people are involved in communication intervention.

Communication entails transmission of all kinds of messages, such as information related to needs, desires, perceptions, knowledge, or feelings. One may transmit information to others and one may receive information. However, because language also may be used to mediate one's own actions and thoughts, communication does not always imply social interaction. Furthermore, we have been careful to not refer to speakers and listeners, because those roles seem to imply intentional, verbal communication. Oral and non-oral modes of communication, such as gestural, graphic, or written systems are subsumed by our definition of communication. Communication need not be intentional or conventional. Nonlinguistic forms (e.g., pointing, facial expressions, body language) also are considered

---

Members of the working group for this strand were: Kevin Cole, Jeanne Coleman, Marty Demetrius, Kris English, Mary Louise Hemmeter, Louise A. Kaczmarek, Ann Kaiser, Linda McCormick, Lee McLean, Mabel Rice, Cyndi Rowland, Tammy Tiner, Steve Warren, and Paul Yoder.

part of the communication system. Early interventionists must maintain a broad conception of what constitutes communication.

Recommended practices in communication intervention are not realized without a broad representation of individuals with knowledge of and familiarity with the child, the child's family, and their larger community or culture. Assessment, goal selection, and intervention processes call upon expertise and collaboration of professionals as well as other interested parties. Individuals that might be involved in these processes include teachers; paraprofessionals; speech-language pathologists and other related service personnel; parents and other immediate family members; extended family members and caretakers; advocates, interpreters, or other community members; and peers. Recommended practices in communication assessment and intervention should be implemented in multiple communicative contexts, sampling from or including all settings in which the child normally has opportunities to communicate.

We propose that communication intervention should be considered for all children with special needs. Others have suggested that "cognitive referencing" (i.e., whether communication development is delayed with respect to general cognitive functioning) be considered when setting priorities or eligibility criteria for speech-language pathology services (e.g., Lyngaas, Nyberg, Hoekenga, & Gruenewald, 1983; Miller, 1981; Owens & House, 1984). The underlying assumption that such children would profit more from treatment has not been born out in the research literature (see Notari, Cole, & Mills, 1992). Indeed, children with developmental disabilities typically have ample room for improvement in the effectiveness and efficiency of their communication. One must keep in mind that language skills are integrally related to a myriad of academic and life support skills. Thus, it is unlikely that individuals will fulfill their potential unless efforts to maximize their communication skills are made.

Recommended assessment practice in communication assessment stresses the broad sampling of communications skills. Assessments should examine the adequacy of modes of communication that are evidenced or plausible, taking into consideration the comprehension and production of communicative content, forms, and functions. Because the field lacks well-accepted, thoroughly standardized, rigorously tested assessment instruments in the communication area (see McCauley & Demetras, 1990; McCauley & Swisher, 1984), team members should explore a variety of assessment methods. Parents are one critical source of information as they provide accounts of their child's communication abilities and needs as well as their concerns and priorities. Interviews and surveys of teachers and other professionals might cover some of these areas and include information about previous communication intervention efforts and activities. In addition to formal testing, one should conduct nonstandardized testing, including assessments of the ease of facilitating more advanced communication performance. The development of practical methods for gathering and analyzing communication samples in the child's everyday settings is a critical need. In addition, ecological assessments must be conducted to analyze the demands and supports for child communication in everyday settings and in future settings.

There are two other assessment issues that are worthy of reiteration in this area. Collection and interpretation of assessment information must reflect sensitivity to linguistic and social norms represented by the child's cultural, ethnic, community, and family contexts.

Also, the explanation and discussion of assessment results must be conveyed in clear and meaningful ways to parents and other team members.

Goal Selection

Goal selection follows from the assessment process and is guided by many of the same principles. It is important that goal selection be a collaborative process. By design, assessment practices should provide useful information pertaining to the many factors that must be considered. For example, one must consider the functionality of possible goals in home, educational, and community settings in the short term as well as the potential for these goals to enhance participation in these and other mainstream settings in the long term. The opportunities for effective use of communication goals and modes of communication in the child's present circumstances and the support for maintained use of these communication skills must be considered. This does not discount the need to consider the realistic potential for rearranging communication environments and modifying communication partners' behaviors, as well.

Intervention Practices

The key to intervention practices is the presentation of frequent opportunities for children with special needs to transmit and receive information in the multitude of ways in which communication is woven into our lives. Thus, recommended practice is indicated largely by the frequency and diversity of communication functions and content, partners, and contexts that set the occasion for communication learning and use. A variety of intervention techniques have been shown to be effective in teaching communication skills. These techniques are undergoing and will continue to undergo considerable change as many investigators and practitioners evaluate refinements in specific techniques and the packaging and repackaging of multiple techniques. Nonetheless, the implementation of these teaching strategies needs to be individualized for children, and the strategies must be applied systematically, with sufficient consistency and frequency to facilitate the acquisition of selected communication goals. Communication intervention should take place in the context of interactions with a variety of adults and children. In addition, environments must be arranged and maintained to ensure there are plenty of opportunities to communicate. The design of environments often must be considered in order to enable and accommodate the specific communication requirements of individual children. Finally, the effectiveness of our intervention efforts must be subject to continual scrutiny. The implementation of intervention efforts as well as their effects must be monitored systematically and regularly. In sum, the indicators of recommended practice outlined below focus on the various ways in which early intervention ensures that children with special needs attain socially effective communication repertoires.

References

Lyngaas, K., Nyberg, B., Hoekenga, R., & Gruenewald, L. (1983). Language intervention in the multiple contexts of the public school setting. In J. Miller, K. Yoder, & R. Schiefelbusch (Eds.), Contemporary issues in language intervention (pp. 239-252). Rockville, MD: ASHA Reports 12.

McCauley, R. J., & Demetras, M. J. (1990). The identification of language impairment in the selection of specifically language-impaired subjects. Journal of Speech and Hearing Disorders, 55, 468-475.

McCauley, R. J., & Swisher, R. (1984). Psychometric review of language and articulation tests for preschool children. Journal of Speech and Hearing Disorders, 49, 34-42.

Miller, J. (1981). Assessing language production in children: Experimental procedures. Austin, TX: Pro-Ed.

Notari, A. R., Cole, K. N., & Mills, P. E. (1992). Cognitive referencing: The (non)relationship between theory and application. Topics in Early Childhood Special Education, 11(4), 22-38.

Owens, R., & House, L. (1984). Decision-making processes in augmentative communication. Journal of Speech and Hearing Disorders, 49, 18-25.

DEC Recommended Practices
Interventions to Promote Communication Skills

Practices that change or enhance the ability of young children with special needs: (a) to receive information from others, (b) to share information with other individuals; and (c) to use language to mediate their actions and cognition and to control their environment. The purpose of communication intervention is to facilitate improvement in the effectiveness and efficiency of communication (however it is demonstrated) in young children with special needs. Communication is broadly conceived: it may be intentional or nonintentional; it may involve conventional or nonconventional signals; it may be expressed through linguistic or nonlinguistic forms; and it may be conveyed through oral or non-oral (gestural, graphic, and written) modes. It should be noted that communication development need not be delayed with respect to other developmental areas in order to justify communicative intervention that involves the services of speech-language pathologists.

Assessment Practices

COM1. Assessment samples the comprehension and production of content, form, and social functions of communication.

COM2. The professional samples communicative performance in a variety of the situations and with a variety of communicative partners represented in the child's everyday life, including peers without disabilities.

COM3. The professional examines the adequacy of current mode of communication and the potential of alternative/augmentative mode(s) of communication if the need for such mode(s) is/are indicated.

Goal Selection Practices

COM4. Functional, oral use in the child's present social settings (and the potential for enhancing participation in mainstream settings) guide the selection and prioritization of goals.

COM5. Goals reflect assessment results regarding children's comprehension and production of various forms, content, functions, and modes of communication, and how these abilities may vary given different social situations.

COM6. The selection of communication goals focuses on potential modifications in environments and partners' behavior (e.g., expectations, opportunities, responsiveness of environments) as well as the child's communicative skills.

Intervention Practices

COM7. Intervention environments provide opportunities for communication involving (a) multiple functions and content, (b) multiple partners, and (c) multiple communicative contexts (e.g., home, classroom, community).

COM8. Communication partners (a) recognize and respond positively to communicative attempts and (b) build on children's interests, topics, leads, requests, and comments.

COM9. Team members integrate communicative intervention strategies into a variety of instructional contexts by providing information about objectives/strategies, relevant training, and giving periodic feedback to other team members.

COM10. Communication interventions include a range of techniques (e.g., milieu teaching, responsive interaction, didactic teaching, direct instruction, etc.) that professionals and/or parents employ with sufficient intensity and duration to result in the acquisition of the child's goals.

COM11. Communication partners individualize/adapt their communication to the child's linguistic sophistication and disability status (e.g., hearing impairment) to ensure that communication directed to the child is understandable.

COM12. Professionals design environments to enable and accommodate children's unique receptive and expressive modes of communicating (i.e., include properly functioning assistive devices such as hearing aids, glasses, communication boards, and other mechanical or electronic adaptive and prosthetic devices) and provide specific training in maintaining such devices.

COM13. Early intervention settings maintain optimal listening/acoustical conditions (i.e., a +30 Db signal-to-noise ratio).

Interventions to Promote Social Skills and Emotional Development

Mary A. McEvoy and Paul Yoder

Few people believe that babies intend to communicate with adults immediately after birth. When babies first interact in meaningful ways with others, their behavior is meaningful primarily because the partner interprets the behavior as such. Because most of the majority of the responsibility for the communicate exchange is held by the partner, adults tend to be more effective social partners with babies than do other babies or young children. For example, babies are much more likely to use gestures and other clear ways of communicating with adults than with peers (Bakeman & Adamson, 1984). Therefore, it is assumed that adults are the primary and most important social partners of children under three years. With this in mind, the first set of "Recommended Practice Indicators" in this section addresses adult-infant interaction. As children grow, peer interactions become increasingly more important. Therefore, the second set of Recommended Practice Indicators primarily addresses supporting peer interaction.

Caregiver-Infant Interaction (Birth through Two Years)

Parents are their babies' first and primary social partners. Parents are also their babies' first teachers about what it is like to play and communicate with others. Parents' lessons about social interaction may be positive or negative. They can teach children that interacting is an emotionally rewarding experience or that social interaction can be dangerous

---

Members of the working group for this strand were: Samera Baird, Deb Burke, Carolyn Cooper, Scott McConnell, Judy Nebrig, Judy Neimeyer, Micki Ostrosky, Cindy Ratekin, Rick Spicuzza, and Paul Yoder.

to their well-being. Mothers often gaze lovingly into the eyes of her baby. Such interactions may teach children that being with mother is rewarding. However, in some homes, many situations between parents and children can be quite scary to the children. Such interactions may cause children to avoid contact with people who might hurt them.

Children's well-being is dependent in large part on the well-being of their parents. When parents are upset or stressed, they are less likely to interact with their children in ways that help children develop socially and emotionally (Crnic, Greenberg, Ragozin, Robinson & Basham, 1983; Crnic, Greenberg, & Slough, 1986; Dunst & Trivette, 1986; Weinraub & Wolf, 1983). During stressful times, they may not be able to find time, energy, or genuine joy in playing with their children.

Professionals can provide services that enhance the well-being of families. In doing so, professionals indirectly and directly enhance the social development and emotional well-being of children. Support to families is directly relevant to the recommended practices in this section. First, as one option on a menu of services, professionals can offer support in learning ways of interacting with children that fosters development. Second, professionals can offer center-based educational services for the child with disabilities. In addition to other advantages of center-based programs, they can provide reliable, temporary respite from the burdens of child care which may free parents to address other pressing needs.

Whether it is a teacher or a parent who is interacting with children, there are certain ways of playing and talking that results in accelerated development of social and communicative skills. The strategies reflected in the recommended practice indicators help children play with adults and toys for longer periods of time (Yoder, 1990). Persistent playing with a single activity or toy may help children learn more about what to do with objects, have more motivation to communicate to adults about objects and activities of interest, and have more to "say" to adults about the world around them. Responding to children's behavior that indicates interest and disinterest may help children learn how to communicate with adults in clear and conventional ways (Harding, 1983). Children probably learn best from playing with adults when the interactions are fun or at least not distressing (Bloom & Capatides, 1987). Finally, when children's physical position during play makes it easy for them to see the adult's face and to play with objects, communication with adults is enhanced.

Peer Interaction (Three through Five Years)

As children grow older, interaction with peers becomes important. Participation in interactions is a critical developmental milestone for children, and for most children, this develops rapidly during the preschool years. Unfortunately, many children with disabilities do not learn to interact simply by playing with other children. As professionals and parents, it is often important for us to either directly or indirectly intervene to enhance the social competence of children with disabilities.

Researchers, practitioners, and parents have developed and evaluated a number of strategies that are designed to enhance child-child social interaction (McEvoy, Odom, & McConnell, 1992). First, these recommended practices include suggestions on ways to organize environments to promote interaction. For example, we know that children are more likely to interact if they are in proximity to other children, if there are other children in the setting that know how to interact, and if there are toys or materials available that children can play with.

In addition, these practices include suggestions for ways that adults can facilitate interaction through the use of prompts and feedback. While the level of intervention may be different from child to child, it is clear from research that adults play a critical role in promoting child-child interaction. Of course, there is a fine line here. Adults must also know how to decrease their prompts and feedback so that children's interactions do not become dependent on such adult support. It is also important that professionals consider the behaviors that impede good social skills. For example, children who are overly aggressive or shy may need to be taught how to begin an interaction with a peer.

Finally, there is a strong emphasis on the importance of promoting social interaction skills outside of the preschool classroom setting. It is important that children learn to use their skills in new settings and with new peers. It is critical that interventions address this important issue of generalization and maintenance of skills.

References

Bakeman, R., & Adamson, L. B. (1984). Coordinating attention to people and objects in mother-infant and peer-infant interaction. Child Development, 55, 1278-1289.

Bloom, L., & Capatides, J. (1987). Expression of affect and the emergence of language. Child Development, 58, 1513-1522.

Crnic, K., Greenberg, M., Ragozin, A., Robinson, N., & Basham, R. (1983). Effects of stress and social support on mothers of premature and full-term infants. Child Development, 54, 209-217.

Crnic, K., Greenberg, M., & Slough, N. M. (1986). Early stress and social support influences on mothers' and high-risk infants' functioning in late infancy. Infant Mental Health Journal, 7, 19-48.

Dunst, C. J., & Trivette, C. M. (1986). Looking beyond the parent-child dyad for the determinants of maternal styles of interactions. Infant Mental Health Journal, 7, 69-80.

Harding, C. G. (1983). Setting the stage for language acquisition: Communication development in the first year. In R. M. Golinkoff (Ed.), The transition from prelinguistic to linguistic communication: Issues and implications (pp. 93-114). Hillsdale, NJ: Erlbaum.

McEvoy, M. A., Odom, S. L., & McConnell, S. (1992). Peer social competence intervention for young children with disabilities. In S. Odom, S. McConnell, & M. McEvoy (Eds.), Social competence of young children with disabilities (pp. 113-133). Baltimore, MD: Paul Brooks.

Weinraub, M., & Wolf, B. (1983). Effects of stress and support on mother-child interactions in single and two-parent families. Child Development, 54, 1297-1311.

Yoder, P. J. (1990). The theoretical and empirical basis of early amelioration of development disabilities: Implications for future research. Journal of Early Intervention, 14, 27-42.

DEC Recommended Practices Interventions to Promote Social Skills and Emotional Development

Best practices in social/emotional development include opportunities for young children with disabilities to develop social competence across a variety of settings with parents, grandparents, brothers and sisters, other family members, peers with and without disabilities, or others, and when necessary, provide intervention to enhance this development. It is assumed that adults are the primary, though not exclusive, social partners who foster social development in the early years. From approximately three years of age and beyond, peers assume a greater role in fostering social development.

Parent-Infant Interaction (Birth through Two Years)

Unless it conflicts with the values of the primary caregivers, professionals encourage and support parents and other primary caregivers of a child to use the facilitative interaction style described in Items SE1-SE5.

SE1. During interactions, adults (a) interpret infants/children's behavior as meaningful, (b) respond contingently in positive ways, (c) allow children to withdraw briefly for the purposes of re-orienting to social interaction, (d) are nonintrusive, and (e) expect developmentally appropriate object manipulation and social interaction.

SE2. When infants/children struggle to do something slightly beyond their ability, adults suggest or demonstrate how to do what the child is attempting.

SE3. When infants/children remain unfocused and inactive for a sustained period, adults attempt to get children to interact with the adult or adult-selected object.

SE4. Adults and infants/children show mostly positive and/or neutral affect during faciliative interactions.

SE5. Professionals or parents appropriately position infants/children for easy access to objects and the adult interactor.

SE6. Family members (parents) are present for and, if appropriate, participate directly in the assessment of infants'/children's social/emotional development.

SE7. Professionals interpret assessment information on caregiver-child interaction as the result of the historical and immediate influence of caregiver and infants/children on each other.

Peer Social Interaction (Three to Five Years)

SE8. Professionals design play activities in which children participate in social interaction with other children and, at times, adults.

SE9. Professionals support children's appropriate initiations and/or responses that indicate their wish to play with other children or adults.

SE10. Professionals provide opportunities for children to develop social skills such as turn-taking, sharing, cooperation.

SE11. Adults provide a postive, nurturing social environment that encourages individual participation and responds to individual social and emotional needs of children.

SE12. Professionals foster social interactions with other children that are happy and fun.

SE13. Professionals facilitate acceptance of children by peers.

SE14. Professionals assist children in learning to respond to (cope with) difficult social situations (e.g., physical aggression from another child, toy conflicts, multiple demands from peers) in an appropriate manner.

SE15. Professionals plan program activities to allow children to participate in social activities with the same children in multiple settings.

Interventions to Promote Adaptive Behavior Skills

Eva M. Horn

Adaptive behavior is a concept that has played a critical role in intervention for persons with disabilities for many years (Harrison, 1987). This role is particularly evident in the area of eligibility evaluation. The assessment of adaptive behavior is generally necessary before individuals are classified as mentally retarded and, increasingly, before other disabilities are diagnosed (Frankenberger, 1984). In this context, adaptive behavior has been defined as the degree to which individuals meet standards of personal independence and social responsibility appropriate for their chronological age and cultural sub-group (Grossman, 1983).

Defining Adaptive Behavior in Early Childhood

In early childhood special education programs, the concept of adaptive behavior has been less evident, particularly in program planning. Narrower definitions and terminology, such as self-care or self-help skills, are typically used. For example, most curricula and texts in early intervention/early childhood special education include a self-care domain rather than adaptive behavior domain (e.g., Allen & Hart 1984; Bailey & Wolery, 1992). A broader definition of adaptive behavior could be useful for the field. Adaptive behavior should include skills that reflect chronologically-age appropriate skills that meet the demands of children's multiple and unique environments. Independent functioning in these

---

Members of the working group for this strand were: Linda Bambara, Moria Fallor, Hazel Jones, Phyllis Spiegel-McGill, Prisca Moore, Leslie J. Munson, Sandy Self, Ellin Siegel-Causey, and Fran Sorber.

environments is the long term goal. Under this definition, the domain of adaptive behavior would include the following components: self-care, community self-sufficiency, personal-social responsibility, and social adjustment.

In early childhood, self-care includes skills of dressing/undressing, eating/feeding, toileting, and grooming (e.g., handwashing, facewashing, toothbrushing). Community self-sufficiency refers to skills that promote age and culturally appropriate functioning with adult supervision within community environments such as restaurants, neighborhoods, and recreational areas. For example, during a church service a child might sit quietly, engage in a "quiet activity" and request only minimal attention from parents. Basic skills in personal/ social responsibility include basic environmental interactions, self-directed behaviors, independent play/self occupation, peer cooperation and interaction, and the assumption of responsibility (e.g.,demonstrates caution avoiding dangers). Finally, the sub-domain of social adjustment would include behaviors such as the ability to adjust to new situations, regularity of behavior patterns (e.g., eating, sleeping), general disposition, tendency to stick to tasks despite obstacles, attention span and degree of distractibility, and amount of stimulation necessary to evoke a response.

Rationale for Inclusion

Several reasons exist for including adaptive behavior in early childhood/early intervention curriculum. First and foremost, independent participation in normal environments is an anticipated outcome of early intervention (Peterson, 1987; Bailey & Wolery, 1992). Children who can dress, feed, and toilet themselves are more independent than children who cannot. Similarly, children's attainment of these skills may decrease caregiving demands on parents. All children require caregiving, but a child with disabilities may have more intense and enduring caretaking demands (Dyson & Fewell, 1986). Further, many of the behaviors defined as adaptive, such as those listed above under social adjustment and personal/social responsibility, address important socially acceptable behaviors. Attaining these skills results in the child appearing more normal, thus promoting a "fit" within community settings.

Specific characteristics of adaptive behaviors provide logical support for their inclusion in preschool/early intervention curriculum. First, many adaptive behaviors are acquired during early childhood years. Mastery of these skills are part of daily routines for all children with or without disabilities. In addition, the development of these skills may require a long time and be acquired in a hierarchial sequence of simple to complex. For example, the skill area of dressing/ undressing may proceed as follows: cooperating with the adult, anticipating the next step when being dressed by pushing a leg through a pants leg, taking off and putting on simple articles of clothing, managing fasteners and then selecting appropriate clothing based on the context.

The acquisition of adaptive behavior may also appear to have a more immediate, concrete impact, particularly from the family's perspective. Many adaptive behaviors are very visible skills (e.g., using the toilet, feeding oneself, independent play) that provide obvious evidence of accomplishment. Others are tied into safety issues, such as appropriate behavior on supervised community trips (e.g., holding the adult's hand before walking across the street). A few specific skills may even have an immediate economic benefit. For example, toileting and eating of regular food eliminates the need for expensive diaper and infant foods.

A final reason for the inclusion of the adaptive behavior domain is related to the impact of these skills on the child's sense of competence and self concept. We need only remember the toddler proudly proclaiming, "I did it!" or "Did it myself" upon pulling off her shoe to recognize the tremendous impact mastery of these skills has on the child's sense of self worth.

Implications for Intervention

The characteristics of adaptive behavior have direct implications for planning and implementing instruction. As we noted above, these skills relate to the "fit" of the child within and across multiple settings. It follows that families should know best where their children have deficits that inhibit this "fit". Thus, they should be the primary source for target skill identification. Similarly, adaptive behaviors are typically a part of regularly occurring events that focus on socially prescribed habitual behaviors (e.g., which food requires the use of utensils in eating and which utensil). This requires that the child learn the cultural expectations of self-care and self sufficiency necessary in group settings inside and outside the home. Exactly what skills are learned is determined by the culture of the sub-settings. Finally, there is significant variance in normal developmental sequences with heavy cultural influence (e.g., movement from breast milk or formula to solid food has varied across generations, regions, and/or nationalities from as early as 6 weeks to as late as two years). All of these factors must be considered when determining "what to teach".

As teachers begin implementing instruction it becomes important that opportunities are presented to learn and master skills that meet social expectations. While adaptive behavior skills are critical and should be taught when they are needed, they are used at a relatively low frequency. Related to this characteristic is the fact that skills must become habitual to be truly functional. That is, they must be performed fluently in response to natural cues, maintained by natural consequences, and performed in varied settings and circumstances. This implies that the interventionist may need to change the traditional instructional settings to reflect the diversity of settings in which the skills naturally occur (e.g., home, community and preschool). In addition, the intervention team may need to make adaptations to schedules in order to increase the opportunities for practicing these skills within the context of routines. Children must be given real life opportunities to practice and thus establish habitual responses to natural cues provided across multiple current and future environments.

Many self-care skills require physiological maturity and learned behavior (e.g., feeding skills, toilet skills). These skills are not discrete behaviors but rather a sequence of behaviors that result in accomplishing a complex function. Early interventionists must be skilled in analyzing the component parts of the complex skills and appropriately assessing each child's current developmental and physiological status in relation to each of these component parts.

Conclusion

In summary, inclusion of the adaptive behavior domain is an important early intervention endeavor. Providing instruction requires that professionals accommodate and adapt to support the specific strengths of individual children and their families. Competent, independent functioning is the long term goal.

References

Allen, K. A. & Hart, B. (1984). Early years: Arrangement for learning. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Bailey, D. & Wolery, M. (1992). Teaching infants and preschoolers with disabilities, second edition, New York: Merrill.

Dyson, L., & Fewell, R. R. (1986). Stress and adaptation in parents of young handicapped and nonhandicapped children: A comparative study. Journal of the Division for Early Childhood, 10, 25-34.

Frankenberger, W. (1984). A survey of state guidelines for identification of mental retardation. Mental Retardation, 22, 17-20.

Grossman, H. J. (Ed.). (1983). Classification in mental retardation (Rev. Ed.). Washington, DC: American Association on Mental Deficiency.

Harrison, P. L. (1987). Research with adaptive behavior scales. Journal of Special Education, 21, 37-68.

Peterson, N. L. (1987). Early intervention for handicapped and at-risk children: An introduction to early childhood-special education. Denver: Love Publishing Co.

DEC Recommended Practices
Interventions to Promote Adaptive Behavior Skills

Adaptive behavior consists of changes in children's behavior as a consequence of maturation, development and learning to meet increasing demands of multiple environments. Independent functioning in these environments is the long term goal. Instruction requires accommodating and adapting to support the specific strengths of individual children. Comprehensive intervention should address the following subdomains: self-care, community self-sufficiency, personal-social responsibility, and social adjustment.

AB1. Adaptive behavior instruction addresses all areas of self-care such as dressing/undressing, eating/feeding, toileting, and grooming.

AB2. Instruction occurs within the context of daily routines in the home, school, and community settings, and results in the independent use of adaptive behavior skills in multiple environments.

AB3. Adaptive behavior instruction reflects a continuum of skill training that ranges from cooperation with others who are assisting with a task to making choices independently that are appropriate for the social context and setting.

AB4. Professionals collect assessment information on children's temperament—the underlying style of children's behavior that sets the stage for their reactions to the world—and adjust intervention procedures to accommodate styles of temperament.

AB5. Instructional strategies consider infant's/children's state of alertness and responsiveness to stimulation prior to interactions and make necessary accommodations.

AB6. Instruction promotes functioning in age-appropriate ways, with adult supervision, within community environments such as restaurants, neighborhoods, churches, and recreational areas.

AB7. Adaptive behavior instruction addresses basic skills in personal/social responsibility, such as, basic environmental interactions, self-directed behaviors, independent play/self occupation, cooperation and interaction in play, and the assumption of responsibility.

AB8. Adaptive behavior activities, materials, and training strategies are concrete and relevant to the lives of young children and their families.

AB9. Adaptive behavior activities, materials, and training strategies are modified as needed to accommodate children's developmental level, specific sensory impairment, specific physical impairments, or special health conditions (that may require medical equipment).

Interventions to Promote Motor Skills

Rebecca F. Fewell

Long before birth, neonates are moving. The birth process is simply another stage in what might be viewed as a movement process. What becomes apparent when newborns are observed is the linkage between movement and learning. Head movements in search of a voice, hand movements to explore a bright toy and later, the full body movement of walking that opens the wonderful world of independence, are all ways in which motor development contributes to the foundation and acquisition of all learning.

When considering recommended practices for early intervention programs, motor development is essential. The field has a body of knowledge about interventions that have proven effective in facilitating the acquisition of motor skills. In these interventions, every caregiver is involved (e.g., in supporting the movements necessary for survival or in the perfection of skills for more effective and efficient movement). It is appropriate for caregivers to use this information in making decisions about motor skills that should be the focus of instruction at a given time and the techniques that are most appropriate for skill acquisition.

A key to quality movement is the child's ability to use sensory information in conjunction with movement. Visual feedback enables an infant to determine how near or far

---

Members of the working group for this strand were: Ann Balch, Ann Campbell, Pip Campbell, Rebecca Fewell, Rhonda Folio, Karen J. Gabel, Carol J. Gryde, Barb Hargrove, JoAnn G. Heiser, Eva Horn, Karen Jarratt, Hazel Jones, Debra McKinney-Wilson, Mary McLean, Amy S. Mildram, Terry Pomeroy, Sheila Robertson, Anne Sparks, Michele Sutton and Cindy White.

a toy might be from his or her grasp, leading to a cognitive question..."Do I reach with my hand or do I crawl to secure my truck?" The importance of vision to movement can be seen in observations of children who are blind and as a result, experience their world differently. Fraiberg (1977) recorded the development of motor milestones in a group of blind children and found significant delays, particularly in skills that required the infant to project his body into space. Folio (1974) reported on older blind children and noted delays continue in the more advanced projectile skills of running, hopping, jumping and skipping.

Appropriate intervention in motor development addresses all aspects of movement. This includes but is not limited to strength, physical and motor fitness, postural control, eye-hand coordination, object manipulation, positioning, mobility, adaptation, generalization, sensory motor integration and spatial awareness. Specific techniques for the instruction of these motor attributes can be found in motor curricula such as Fit for Me (Karnes, 1992), BodySkills (Werder & Bruininks, 1991) and the Peabody Developmental Motor Activity Cards (Folio & Fewell, 1983).

Given that movement is a constant body activity, it is appropriate that facilitation of quality movements be incorporated into all daily routines. For example, it is just as important to focus on walking while going to a table for a meal as it is when walking a straight line. Without the generalization of effective movement patterns to all situations, the teaching of these skills is of little value. Likewise, it is important that all family members concerned about a young child's development recognize the need to facilitate efficient motor skills and contribute to the development of these skills.

Motor movements are often associated with materials or equipment and used in all environments. It is a good practice to look at how these variables influence skill acquisition and to incorporate strategies that enable one to manipulate these things to produce a positive impact on motor skill development. For each child, his or her motor abilities must be a primary consideration with each material, piece of equipment, or environmental arrangement or adaptation being used to the extent needed in order to encourage a child's control over the physical space.

It is expected that the motor intervention and/or therapy program will be based on assessed needs. These assessed needs must be stated in ways that are measurable so that the impact of the curricula can be determined. Additionally, curricular changes should be based on changes in the child's motor performance. Assessment of motor skills should be one aspect of a total program evaluation if the whole child and family is to be considered the focus of early intervention efforts.

Finally, it is important for a child's motor goals and the intervention program to reflect a family's preferences for their child. Intervention programs and families both have children's development as a major concern. When a program and a family can work together, sharing common goals, practices and responsibilities, a child has his or her best chance for acquiring the needed skills.

References

Folio, M.R. (1974). Assessing motor development in multiply handicapped children. Paper presented at the annual meeting of the Council for Exceptional Children. New York.

Folio, M. R., & Fewell, R. R. (1983). Peabody Developmental Motor Scales. Austin, TX: Developmental Learning Materials.

Fraiberg, S. (1977). Insights from the Blind. New York: Basic books.

Karnes, M.B. (1992). Fit for Me: Activities for Building Motor Skills in Young Children. Allen, TX: Developmental Learning Materials.

Werder, J.K., & Bruininks, R.H. (1991). Bodyskills. Allen, TX: Developmental Learning Materials.

DEC Recommended Practices
Interventions to Promote Motor Skills

Motor intervention facilitates control of one's own body, including large and small muscle groups, in order to interact with and move within the environment. The assumptions underlying motor development interventions are that (a) motor development is a key component for the foundation and acquistion of all learning and (b) motor intervention is a necessary component for all children eligible for early intervention.

M1. Professionals base motor development interventions on theoretical constructs accepted by the field.

M2. All caregivers for individual children participate in the interventions that enhance motor development.

M3. All persons providing motor development interventions receive the necessary education and training for conducting the interventions.

M4. The intervention program establishes written criteria, standards, and guidelines for making decisions about the service format for motor interventions.

M5. Professionals facilitate movement skills in response to and coordinated with sensory input.

M6. Motor skills intervention addresses all components of motor development including but not limited to: strength, physical and motor fitness, postural control, eye-hand coordination, object manipulation, positioning, mobility, adaptation, generalization, parent eduction, technology, sensory motor integration, and spatial awareness.

M7. Professionals and/or caregivers implement motor skills interventions in the context of normal activities and routines (i.e., are activity-based).

M8. Professionals and/or caregivers adapt motor activities, materials, equipment, environments, and intervention strategies as needed to accommodate the abilities of individual children.

M9. Professionals and/or caregivers facilitate motor skills in a way that promotes use in multiple environments.

M10. Professionals provide children with methods for independent mobility.

M11. Professionals and/or caregivers position children in ways that facilitate appropriate social and instructional interactions (e.g., children sit at eye level with other seated children, movement and positioning are done efficiently so that children do not miss parts of activities).

M12. Professionals and/or caregivers change the position of children frequently for children who are unable to reposition themselves.

M13. Programming for all children includes opportunities for organized gross motor activity.

Transition

Mary Beth Bruder and Lynette K. Chandler

Transition has been defined as an outcome oriented process (Will, 1985), the key elements of which are planning and cooperation. Strategies and procedures that are planned and employed to ensure the smooth placement and subsequent adjustment of a child as he or she moves form one program to another are also important elements (Huttinger, 1982). A successful transition is a series of well planned steps that result in the placement of the child and family into another setting.

Within the field of early intervention and/or early childhood special education transition can be defined as the process of moving from one program to another, or from one service delivery mode to another (Chandler, 1992). While formal program transitions for young children with disabilities typically occur at age three (into preschool) and age five (into kindergarten), transition between services, providers, and programs also can occur throughout these early years. For example, transitions can begin for some children at the moment of birth, if it is determined that their health status requires transfer to a special care nursery. The families of these children may then interact with at least two different hospital staffs and two medical facilities. In addition, some of these children are transferred back to a community hospital prior to discharge home. Each of these moves serves as another transition for the family and infant. Additionally, if the infant enrolls in an early

---

Members of the working group for this strand were: Robert Boyce, Barbara Fiechtl, Susan Gold, Ann H. Hains, Esther Kottwitz, Cathy Liles, Peggy Stephens, Sharon Rosenkoetter, Beth Rous, Ilene Schwartz, and Gail Trujillo.

intervention program, she and her family will experience other transition points during service delivery. For example, the type and intensity of intervention services may be changed according to child need and/or family request. As services change, so may providers. That is, a family and child may work with a number of providers, and each may represent another transition point for the child and family.

Successful transitions are a primary goal of early intervention and early childhood special education (Fowler, 1982; McCormick & Kawate, 1982; Salisbury & Vincent, 1990). Transition presents children and families with new opportunities for growth and development. However, it also presents many challenges and can create stress for both children and families. Well planned transitions can be an enabling and satisfying experience, while poorly planned or unplanned transitions can be a time of vulnerability and uncertainty for children and families (Rice & O'Brien, 1990). The type of planning and practices that are employed can influence the success of transition and satisfaction with the transition process experienced by all concerned.

According to Wolery (1989), transition should fulfill four goals: a) to ensure continuity of services; b) to minimize disruptions to the family system by facilitating adaptation to change; c) to ensure that children are prepared to function in the receiving program; and d) to fulfill the legal requirements of P.L. 99-457. In order to achieve these goals, it is necessary to assist families and their children. These supports must come from both the sending and receiving program. Both programs should collaboratively insure the continuity of appropriate services to the family and the child. Unfortunately, many programs and services have not adapted formal procedures to facilitate the transition of families and children either into or out of their program.

In order to develop comprehensive, formal transition procedures, several components which influence the success of transition must be addressed. These are: a) state and local agencies, b) sending and receiving program providers, c) families and other caregivers, and d) children.

State and Local Agency Component

Effective transitions rely on proactive planning to insure a smooth process. This planning must be comprehensive and it must occur prior to the time a child and his or her family actually moves to a new program. Planning for transition should start at the agency level and should occur within (intra-agency) and between (interagency) agencies. Thorough interagency planning will involve the development of interagency agreements that specify the roles and responsibilities of each agency, the composition of the transition team, the policies and procedures related to transition, and timeliness for initiating and completing transition tasks. Interagency agreements will promote interagency cooperation and communication and should ensure the continuity of a child's program as well as the implementation of transition procedures as planned (Hains, Fowler, & Chandler, 1988).

Intra-agency planning should specify the lines of communication within an agency or program and the roles and responsibilities of providers within a program. Planning within programs can help assure that program providers will have adequate time and resources to plan for transition and to complete transition tasks.

Sending and Receiving Program Providers Component

"Sending" program providers work in the program the child is leaving; "receiving" providers work in the program to which the child is moving. In order for transition to be successful and for planning to be comprehensive, all team members must participate. This includes program providers, the child when applicable, and the child's family. The program providers component includes individuals within programs and agencies that provide services to the child and family. Program providers may include home-based or classroom-based teachers, physical and occupational therapists, speech pathologists, nurses, social workers, case managers or service coordinators, and parent coordinators.

Providers in the sending and receiving programs can facilitate the transition process in several ways. Providers in both programs can prepare the child for transition and provide environmental supports to meet the child's needs during the transition process. They also can involve families and other caregivers in transition planning, to the extent that families desire, and provide information concerning community resources and options for transition to families. Sending and receiving program providers also can facilitate transition by following the guidelines and procedures that were identified on the interagency agreement and during intra-agency planning. Some of these procedures include sharing information between programs, observing in the sending and receiving programs to identify similarities and differences and the requirements of each program, working cooperatively with each other and with the child's family, preparing individuals in the receiving program for the child's transition, and completion of the tasks identified on the transition timeline.

Families and Other Caregivers Component

Families and other caregivers are important members of the transition team. They are the constant in a child's life. This fact is emphasized at every transition point for a child who participates in early intervention or early childhood special education. The family must be integrally involved in any transition planning. Family involvement should begin upon the child's entry into a program.

Participation by family members (e.g., parents) can be beneficial for sending and receiving program providers, the child, and family members. Parents and other caregivers can participate in the transition process in several ways, ranging from receiving information about transition to active decision making and child preparation. The level of family and other caregiver participation in transition should be individualized across families and reflect family concerns, resources, and priorities.

All families with a child who will make a transition (and other caregivers as designated by the family) should receive information about the anticipated transition, the transition process or steps and tasks to be completed, options for the child and family for future services, and options for participation in the transition process. It should be emphasized that families also should be considered as equal members of the transition team. As members of the transition team, families should be given opportunities to meet with providers from the sending and receiving programs, to observe possible programs and service options before a transition occurs, to attend all transition meetings, and to participate in programmatic decisions which affect transition.

Child Component

The final component in the transition process is the child. The success of transition is influenced by the skills and behaviors the child exhibits during transition and the match between child skills and behaviors and the expectations and requirements of the receiving program. This match is dependent, in part, on the preparation for transition provided by sending and receiving program providers, the family and other caregivers, and the environmental supports provided in the receiving program.

An important part of child preparation is the development of transition skills and the generalization of transition skills from the sending program to the receiving program. Transition skills are skills and behaviors that facilitate transition between programs by helping a child function well in and adjust to the next environment. Transition skills may include social behaviors and self-help skills, motivation and problem solving skills, preacademic or academic support skills and task related behaviors, conduct behaviors, and communication skills. Child preparation should focus on the assessment of transition skills that are needed in the receiving program as well as development and implementation of methods to promote acquisition of these skills. Child preparation also should include methods to promote the maintenance and generalization of transition skills as well as other skills and behaviors (e.g., academic skills, child strengths) to the new program. Child preparation also should address environmental arrangements or supports in the receiving program and methods to address difficulties when they occur.

Other Issues

The purpose of transition planning is to support the movement of children and families as they move from program to program or service to service. In order to facilitate transitions, a number of other issues must also be addressed by service providers and the agencies they work for. These issues include administrative support for planning, personnel training and evaluation of the transition process.

Administrative Support for Planning

As part of planning for the transition, staff should be encouraged to visit both the sending and receiving programs in order to share information about similarities and differences between programs and to familiarize themselves with the requirements of each program. Time must be allocated by administrators in both sending and receiving programs to support this activity. Administrative support for this planning activity cannot be underestimated, as time and resources must be provided to program staff as necessary. For example, staff coverage may be necessary to allow members of the transition team time away from direct service to visit other programs and meet with other program providers. Provisions for staff to visit programs and collaboratively plan for transition must be provided through administrative support and documented on the interagency and intragency transition plans.

Personnel Training

In order to address the need for comprehensive, successful transitions, personnel must be prepared to include transition as part of the intervention plan. Transition must be seen as a continuation of a child's intervention plan, and the intervention team must be able to develop, implement, and evaluate any transition involving the child and family. Staff must be skilled at curriculum development and adaptation and they must be able to collaborate across programs and other disciplines.

These requirements for staff should be incorporated into personnel training programs at both the preservice and inservice level. This must also occur within discipline specific training (e.g., for nurses and speech and language pathologists). Transition must be addressed as a systematic process. Training at an inservice level (i.e., within an agency or between sending and receiving programs) should focus on general issues related to transition planning as well as the specific skills, tasks, and processes that staff will be expected to employ. At a preservice level, personnel training should focus on general issues and recommended practices related to all types of transition, as well as models and options for transitions that may occur at various points in a child's life.

Evaluation of the Transition Process. Evaluation of the transition process should occur within each transition component and should include both formative (continuous) and summative (summary) measures. In addition, evaluation should include subjective measures such as parent and teacher satisfaction with, and perception of, the transition process. Subjective information will complement other objective information about the success of the transition process, such as maintenance of the child and family in the receiving program. Evaluation should be multidimensional to address all aspects of the transition process within and between agencies, within and between sending and receiving programs, and within and across individual children, families, and other caregivers.

References

Chandler, L.K. (1992). Promoting young children's social competence as a strategy for transition to mainstreamed kindergarten program. In S.L. Odom, S.R. McConnell & M.A. McEvoy (Eds.) Social competence of young children with disabilities (pp. 245-276). Baltimore, MD: Brookes.

Fowler, S.A. (1982). Transition from preschool to kindergarten for children with special needs. In K.E. Allen & E.M. Goetz (Eds.), Early childhood education: Special problems, special solutions (pp. 309-330). Rockville: Aspen.

Hains, A.H., Fowler, S.A., & Chandler, L.K. (1988). Planning school transitions: Family and professional collaboration. Journal of the Division for Early Childhood 12, 108-115.

Huttinger, P.L. (1981). Transition practices for handicapped young children: What the experts say. Journal of the Division for Early Childhood, 2, 8-14.

McCormick, L., & Kawate, J. (1982). Kindergarten survival skills: New directions for preschool special education. Education and Training of the Mentally Retarded, 17, 247-252.

Rice, M.L., & O'Brien, M. (1990). Transition: Times of change and accommodation. Topics in Early Childhood Special Education, 9(4), 1-14.

Salisbury, C. & Vincent, L. (1990). Criterion of the next environment and best practices: Mainstreaming and integration 10 years later. Topics in Early Childhood Special Education, 10(2), 78-89.

Will, M. (1985). Transitioning: Linking disabled youth to a productive future. OSERS News in Print, 51, 11-16.

Wolery, M. (1989). Transition in early childhood special education: Issues and procedures. Focus on Exceptional Children, 22, 1-16.

DEC Recommended Practices
Transition

Transition is the process of change within or between services that involves children, families, other caregivers, and service providers. The transition process should fulfill the following four goals: (a) ensure continuity of services; (b) minimize disruption of the family system; (c) promote child functioning in the natural environment or the least restrictive environment (e.g., home, mainstreamed preschool program, Head Start, day care, etc.); and (d) involve planning, preparation, implementation, and evaluation within and between programs and with the family. Transition may occur when there is a change in agencies, programs, location or type of services, personnel, program philosophy, regulations, or funding sources.

State and Local Interagency Systems

T1. Administrators, sending and receiving providers, and family and other caregivers develop written interagency agreements.

T2. Formal mechanisms are in place for ongoing communication, within and between agencies.

T3. Program providers, administrators, and families have adequate time to plan and prepare for transition.

Families and Other Caregivers

T4. Program staff inform families about anticipated transition as early as possible.

T5. Families can initiate transition when they believe it is necessary.

T6. Families receive information about the transition process, the components and steps in transition, the child and family's options for future services, and options for participation in the transition process.

T7. Families have opportunities to visit future program options and to talk to other families as well as service providers about future programs.

T8. Families have the opportunity to jointly meet with sending and receiving providers.

T9. Program providers have or receive adequate training to address issues of transition and to work with families during transition.

T10. Families have a single point of contact (i.e., one individual) concerning transition.

Sending and Receiving Providers

T11. Service providers are familiar with the tasks, timelines, roles and responsibilities of all providers as designated on the interagency transition agreement and related procedures.

T12. Service providers are familiar with service options and resources within the community and are able to make resource referrals.

T13. Service providers visit each other's programs and share observations in planning for transition.

T14. Service providers in the receiving programs prepare other individuals (i.e., children, staff members) for a child's transition into that program.

Child

T15. Service providers and family members determine the transition skills the child needs in the next or receiving program.

T16. Service providers, family members, and other caregivers assess transition skills in order to determine those skills that a child currently exhibits and those that a child will need in the next or receiving program.

T17. Service providers, the child's family, and other caregivers develop plans to help a child acquire transition skills.

T18. Service providers, the child's family, and other caregivers arrange or adapt the environment and use adaptive or assistive devices as methods to facilitate the development of transition skills as needed.

T19. When possible, service providers assess and incorporate child preferences and opinions.

T20. Service providers, the child's family, and other caregivers build supports to anticipate and address difficulties children may have in making transitions (e.g., visits to receiving program, gradual increase in attendance in receiving program).

T21. Service providers, the child's family, and other caregivers plan for or allow adequate time for the child's adjustment to the new service or program.

T22. Service providers, the child's family, and other caregivers have access to supervision, training, and support necessary to carry out the roles and responsibilities associated with preparing a child for transition.

Personnel Competence

Vicki Stayton and Patricia Miller

Essential to the provision of quality services for young children with special needs and their families is the availability of qualified personnel. Prior to the passage of P.L. 99-457, shortages in early childhood special education personnel were reported. With the full implementation of P.L. 99-457, the need for personnel will continue to increase dramatically. This need for well-prepared personnel includes both entry-level personnel as well as professionals who are already in the field but who lack the appropriate knowledge and skills to implement services for infants, toddlers, and preschoolers with disabilities and their families as required by P.L 99-457 and recommended practices in the field.

The Division for Early Childhood of the Council for Exceptional Children (DEC) has taken a leadership role in identifying standards for the preparation of early childhood special educators. In 1989, McCollum and other members of the DEC Personnel Committee prepared a DEC White Pater outlining recommendations for certification of early childhood special educators (McCollum, McLean, McCartan, & Kaiser, 1989). These recommendations, which were developed as guidelines for states as they develop personnel standards and for universities/colleges as they develop training programs, suggested a two-level certification process with a generalist Beginning Professional Certificate (Birth-5) and a specialist Continuing Professional Certificate (Birth-5). A state system that assures continued

---

Members of the working group for this strand were: Norman Allard, Jeanette Behr, Ruth Cook, Mary Hendricks, George Jesien, Heather Bennett McCabe, Marileigh Mims, Sarah Rule, Susan Sandall, Susan Smith, Susan Walter, Anne Widerstrom, and Barb Wolfe.

professional development was also advocated. A primary focus of these recommendations was the suggested content of personnel preparation programs.

Although the recommended practices included in this document address both content and process issues, the primary focus is on process. The content identified by McCollum and her colleagues (1989) is strongly supported; content is only addressed in these indicators in a general manner. The remainder of this section highlights the preservice and inservice recommended practice indicators.

Preservice Personnel Preparation

Preservice education programs which are designed to prepare personnel to serve infants, toddlers, and preschoolers with disabilities and their families have most often been provided at the graduate level. As more undergraduate and associate degree programs are developed, the need for identifying appropriate entry-level curriculum content and performance competencies, and the strategies for planning and delivering that content will intensify. Many graduate programs are tailored to prepare specialists to assume lead teaching, supervising, or administrative positions. Undergraduate and associate degree programs are needed, therefore, to train large numbers of early intervention professionals and paraprofessionals to work directly with children and families.

Many states are moving toward preservice personnel development in early intervention as a two-tiered effort. These two-year and four-year degrees will be more economically and philosophically attractive to policymakers and deans of colleges if they integrate existing curricula in early childhood education and early childhood special education. The merging of curricula will necessitate a merging of personnel competencies, standards and training efforts.

The merging of professional standards across early childhood education and early childhood special education is consistent with the philosophy of inclusion of children with disabilities in all facets of education and society. The research on integrated preschool programs supports the belief that benefits accrue for both typically and atypically developing children in those programs. The entry-level professional should be educated and qualified to meet the needs of infants, toddlers, and preschoolers who have a variety of abilities and needs.

At the graduate level, higher education programs can offer curriculum content and experiences which provide an opportunity for specialization. Graduate level programs may offer a focus in infancy, family study, consultation and integration, and other leadership roles. Prerequisites to these programs should include some level of experience and formal training in working with children under the age of five who have varying abilities and their families.

Personnel preparation efforts in early intervention are currently responding to two professional issues: the immediate need for large numbers of qualified personnel, and the evolving philosophy of integration. The Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC) have created both formal and informal plans for the integration of professional standards. A new age for personnel preparation which will contribute to the end of segregated, categorical programs for young children, their families, and their professional support teams has arrived.

Inservice Personnel Preparation

Inservice is defined as "any planned program of learning opportunities afforded staff members of schools, colleges, or other . . . agencies for purposes of improving the performance of the individual in already assigned positions" (Harris, 1980, p. 21). Both the inservice literature and the literature specific to characteristics of adult learners served as basis for identifying recommended practice in this area. The following discussion provides an overview of the indicators of recommended practice for inservice personnel preparation.

Content Indicators

Adult learners are characterized as: (a) self-directed, (b) entering any educational activity with a wealth of previous personal and professional experiences, and (c) motivated to learn when they experience a need to know or do something to perform more effectively. Therefore, the content of inservice should be derived from assessed needs of the participants with the needs assessment addressing competencies that the learner must demonstrate in his/her employment setting. Needs-based inservice lends itself to activities that acknowledge the experiences of participants and build upon those experiences that are relevant to the learner's situation and that emphasize the learner's own goals as the primary incentive for participation.

Process Indicators

Planning for Inservice

Section 303.360 of P.L. 99-457 requires that inservice be provided on an interdisciplinary basis when appropriate and to a variety of personnel. This provision has been interpreted as meaning that inservice planning should be a team effort involving family members as consumers, professionals from a variety of disciplines, and paraprofessionals. This contention is supported by the adult learning literature which reports that decision-making specific to inservice should be a collaborative effort between the recipients and the provider.

Delivery of Inservice

Section 303.360 of P.L. 99-457 has also been interpreted as meaning that inservice should be delivered by an interdisciplinary team to an interdisciplinary audience to ensure that individuals within programs develop a shared knowledge, attitude, and skill base to implement changes in service delivery. Family members are integral participants on this inservice team.

Successful implementation of inservice is, in part, dependent on the consideration of certain logistical and support factors. First, inservice should be financially and geographically accessible to participants with local sites most desirable. Second, inservice should be scheduled as to avoid interfering with the participants' job requirements. Third, inservice should have explicit administrative support. This support may be evidenced by facilitating staff participation in inservice (e.g., release time), providing incentives for completing activities (e.g., salary increases), and allowing for change in direct service practices. And finally, inservice is most successful if co-workers support the inservice by participating as team members in the actual inservice activities, or by participating in worksite activities such as team meetings to discuss the application of skills, or working in teams/pairs to provide each other with immediate feedback.

Another aspect of inservice delivery that affects its quality is the facilitator. Inservice facilitators must be competent in the inservice process by being able to: (1) plan and organize inservice, (2) work with adults, (3) match content with appropriate training strategies, and (4) evaluate training effectiveness. Inservice facilitators must also establish credibility with the participants by being knowledgeable in the inservice content and being able to incorporate the participants' experiences and needs into the activities. Although the role of inservice facilitators may vary depending on the purpose of the inservice (e.g., informer, demonstrator), above all, the facilitator must be enthusiastic.

The traditional "one-shot" model for inservice delivery is not recommended. Inservice has more long-lasting benefits if it is conducted as a sequential, ongoing process. Effective inservice includes the following components: (a) presentation of the content (e.g., theory, knowledge-base, description of a skill or strategy), (b) modeling or demonstration of skills or models of teaching/practice, (c) practice in simulated and actual instructional settings, (d) structured and open-ended feedback, and (e) ongoing follow-up in the actual instructional setting. This type of model lends itself to a variety of activities which are selected based on the component being implemented. It also facilitates the active involvement of participants in a problem-centered rather than subject-centered approach which is consistent with the adult learning literature.

Evaluation of Inservice

To ensure that inservice is effective, evaluation must be conducted. Evaluation should address both long-term and short-term effects. A variety of evaluation strategies (e.g., satisfaction questionnaires, observation) should be utilized and be selected based on the goals and objectives of the inservice.

References

Harris, B.M. (1980). Improving staff performance through inservice education. Boston: Allyn and Bacon, Inc.

McCollum, J., McLean, M., McCartan, K., & Kaiser, C. (1989). Recommendations for certification of early childhood special educators. Journal of Early Intervention, 13, 195-211.

DEC Recommended Practices
Personnel Competence

Personnel development includes inservice and preservice efforts to recruit, prepare, and retain degree and non-degree personnel from all early intervention (B-5) and related disciplines.

Preservice Best Practice Indicators

PC1. Family members are involved in planning, implementing, and evaluating preservice curriculum.

PC2. Content provides a strong foundation in typical and atypical child development.

PC3. Content includes study of cultural diversity.

PC4. Experiences ensure participation with families that develops an awareness of families' daily lives.

PC5. Content and process reflect a "theory to practice" orientation.

PC6. Content emphasizes families as systems.

PC7. Students develop and implement intervention plans based on knowledge of developmental/learning theories.

PC8. Students receive feedback from professors, supervisors, and parents on a regular basis through both formal and informal means.

PC9. Educational content and activities promote a commitment to continuing professional development.

PC10. Content reflects a life span perspective that promotes smooth transitions for children and families.

PC11. The program prepares students to assume a variety of roles with families and young children (e.g., service coordinator, direct service provider, consultant, program manager).

PC12. Instructors model the values and behavior expected of professionals in the field.

PC13. Instructors have both experience and professional training related to children birth through five with special needs and their families.

PC14. Content and process in graduate training develops skills in advocacy, policy development and analysis.

PC15. Content and process in graduate training includes work in program development and administration.

PC16. Content and process at the graduate level focuses on a specialization area in early intervention (B-5).

PC17. Instructors match field experiences to students' prior experiences, interests, and needs.

PC18. Field experiences provide opportunities with infants, toddlers, preschoolers, with and without disabilities, and their families.

PC19. Field experiences include experience as an interagency and intragency team member.

PC20. Field experiences provide opportunities to demonstrate performance competencies identified by the discipline's professional association.

PC21. Qualified university personnel supervise all field experiences.

PC22. Field experiences include a variety of settings that represent potential employment models.

PC23. Field experiences provide opportunities to work with children both with and without disabilities who represent diverse cultural and ethnic backgrounds.

PC24. Field experience sites and personnel reflect recommended practice competence.

PC25. Field experiences include substantial work with families, which is closely supervised.

PC26. Students learn and practice assessment that is culturally unbiased and includes diagnosis for placement, assessment for developing IEP/IFSP goals and for planning individualized curriculum, performance monitoring and evaluation of program effectiveness.

PC27. Students learn and practice a variety of interventions with children ages birth through five with disabilities and their families, including a) direct instructional techniques, b) activity-based techniques, c) developmentally appropriate practices, d) incidental learning strategies, and e) strategies for promoting effective adult-child and child-child interactions.

PC28. Students learn and practice strategies that foster children's engagement with appropriate tasks and activities, and strategies to maintain children's engagement.

PC29. Students learn to access, read and understand current literature and research related to young children with disabilities and their families.

PC30. The preparation program includes a comprehensive examination, written thesis and/or field study as culminating experiences, carried out under the supervision of program faculty.

PC31. The preparation program's full-time faculty, part-time instructors and field supervisors represent the diverse ethnic and cultural groups served in programs for young children with disabilities and their families.

PC32. The preparation program's faculty and staff make efforts to recruit and retain members of ethnic and cultural minorities as students.

PC33. Students become aware of, discuss, and apply their profession's code of ethics.

PC34. Students learn and practice strategies to incorporate technology to support children's learning.

PC35. Preparation programs base coursework on performance competencies as identified by the discipline's professional associations.

Inservice Indicators

PC36. Personnel development addresses competencies that individuals must demonstrate in their job.

PC37. Families participate in delivery of inservice training.

PC38. Program staff base inservice training on assessed needs of participants.

PC39. Inservice is developed with input from persons representing multiple disciplines.

PC40. Team members representing multiple disciplines deliver inservice training.

PC41. Inservice training adheres to the following 4-step model: (a) presentation (b) opportunities to observe, (c) opportunities to practice, and (d) feedback about practice.

PC42. Persons delivering inservice are qualified, enthusiastic, knowledgeable, well prepared and empathetic.

PC43. Administrators facilitate staff participation in inservice training (e.g., reimbursement of expenses, release time), support/accommodate change in practice based on training, and provide incentives for participation (e.g., salary, career ladder).

PC44. Colleagues at the work site support inservice training (i.e., team participation, onsite support for implementation).

PC45. Inservice training includes follow-up.

PC46. Inservice is accessible and planned according to participants' schedules, geographic locations, and financial resources.

PC47. Evaluation of inservice training includes a variety of methods (e.g, satisfaction, demonstration of competency, change in roles).

PC48. Evaluation addresses long-term effects as well as short-term effects.

PC49. Goals and objectives of the inservice training serve as the basis for selecting the type and intensity of inservice activities.

PC50. Inservice training is multiphased, sequential, and ongoing.

PC51. Inservice training includes training and practice in using a problem solving approach to decision making for all team members.

PC52. Training includes practice in promoting a sense of shared responsibility for planning and intervention among family members, paraprofessionals and professionals.

PC53. Team members receive training in conflict resolution, mediation, and expressing differences of opinion in positive ways.

Program Evaluation

Scott Snyder

Recommended practices for Program Evaluation are based on a number of guiding assumptions. First, program evaluation is not a homogeneous construct. There are broad spectra of potential purposes, methods and audiences for program evaluation in early intervention. Likewise there is substantial diversity in the characteristics of early intervention programs, children and families served by such programs, and the contexts of such programs. The recommended practices for program evaluation reflect fundamental principles that can be broadly applied within the field rather than specific practices that are recommended for specific purposes or contexts of evaluation. That is, the indicators sacrifice specificity for generalizability. It is anticipated that the principles can be refined and operationalized to better serve more narrowly focused needs of specific evaluations.

Second, it was assumed that the availability of established standards for the practice of program evaluation in education and related fields (Joint Committee on Standards of Educational Evaluation, 1981; Rossi, 1982) provides an appropriate foundation for developing standards applicable to early intervention. The existing standards were synthesized and amended to represent the field. Again, the generalizability of the existing principles took precedence over specificity.

The final major assumption was that program evaluation (whether internal or external,

---

Members of the working group for this strand were: Carl Dunst, Pat Gallagher, Gerald Greenfield, Larry Johnson, Katherine McCormick, Susie Perett, Rob Sheehan, and Beverly Stewart.

formal or informal) is conducted under limited resources, limited time, and administrative and political constraints. Due to such limitations, it is not reasonable to assume that all of the recommended practice principles can be met equally well within a given evaluation. Therefore, the "necessity" of a principle should be viewed in the context of the decisions and constraints of the evaluation.

Overview

The recommended practices primarily represent a synthesis of program evaluation standards presented by the Evaluation Research Society (Rossi, 1982) and the Joint Committee on Standards for Educational Evaluation (1981). Stufflebeam (1990) states that a number of studies which have examined the two sets of standards have found them to be largely overlapping. The framework of the recommended practices in Program Evaluation follows the outline of the Standards for Evaluations of Educational Programs, Projects, and Materials (Joint Committee on Standards for Educational Evaluation, 1981). The framework categorizes the indicators according to four attributes of an evaluation: utility [those practices that support the ability of an evaluation to serve the needs of evaluation stakeholders (program administrators, program staff, parents, funding agents) in a manner that is credible, informative, timely and influential]; feasibility (those practices that support the conduct of program evaluation within the constraints imposed by limited resources, time demands and the political subtext of early intervention programs); propriety (the ethical and constitutional rights of participants in, and audiences of program evaluation and the responsibilities of evaluators to protect such rights); and technical adequacy[1] (those practices that support the gathering, analysis, and interpretation of information in ways that are valid, reliable, accurate, representative, fair, and replicable.

A number of evaluation models are available [e.g. CIPP (Stufflebeam, 1983), goal-free evaluation (Scriven, 1972), responsive evaluation (Stake, 1980); illuminative evaluation (Parlett, 1981), discrepancy evaluation (Provus, 1971)]. The recommended practice indicators are not exclusively bound to any particular model. Similarly, the indicators do not encourage specific methodologies for planning, designing or managing evaluations; gathering and analyzing information, or disseminating results. Rather, evaluations should employ the model and methods that best serve both the needs of the evaluation and the principles of recommended practice. This eclectic orientation to models and methods of program evaluation is supported by the framers of the existing standards.

None of the recommended practice principles are specific to a single program evaluation decision (e.g., program revision), evaluation object (community needs, child performance, program cost, staff performance, materials, program components, parent participation, etc.) evaluation type (formal vs. informal, conducted by internal staff or external evaluator, large-scale vs. small). As with the original standards, it was hoped that the recommended practices could be applied by a range of practitioners. These include early interventionists interested in improving the quality of services they provide to children and families; administrators of local early intervention programs interested in evaluating the performance of staff; state-level administrators wishing to determine the cost-effectiveness of services provided to infants with special needs and their families; or a professional evaluator hired to evaluate the differential effects of two early intervention models.

---

[1] This attribute is titled "accuracy" within the Joint Committee standards but is renamed here for the purpose of clarity.

While the specific principles are not ordered in any sequence or hierarchy within the four major attributes, the attributes have been listed in an order recommended by the Joint Committee (Stufflebeam, 1990). The order of the attributes (utility, feasibility, propriety, and technical adequacy) is based on the following logic: (a) before undertaking an evaluation there is a need to be certain that the findings from an evaluation will be useful (e.g., in providing important feedback or assisting in decision-making) (b) if the evaluation is expected to produce some useful information it must be determined if conducting the evaluation would be feasible and efficient given available resources to obtain and report information in time for its use; (c) if the evaluation is determined to be feasible, possible obstacles to conducting the evaluation within the bounds of propriety must be considered; and finally (d) if it is determined that the evaluation can be conducted ethically, legally, and responsibly, the attention and efforts focus on the technical aspects of the evaluation. Stufflebeam (1990) and Worthen and Sanders (1987) present a table which summarizes the Joint Committee's consensus on the relationship of their standards to ten common tasks of program evaluation. While the standards of the Joint Committee and the recommended practice indicators discussed here are different, there is sufficient overlap to make such a table informative to the reader interested in clarifying to which tasks specific principles most clearly apply.

In addition to the consensual validation of these recommended practice principles, supplemental evidence of their validity is available. Stufflebeam (1990) reviewed studies that have addressed the validity of the Joint Committee's standards (including their applicability to specific situations and disciplines) and concluded that while they are not a panacea, their content is sound and their applicability is well established. An annotated bibliography supporting each of the Joint Committee's standards was developed by Wildemuth (1981). Finally, various published resources in early intervention contain discussion of principles and guidelines similar to those comprising the recommended practices.

References

Joint Committee on Standards for Educational Evaluation (1981). Standards for Evaluations of Educational Programs, Projects, and Materials. New York: McGraw-Hill.

Parlett, M.R. (1981). Illuminative evaluation. In P. Reason & J. Rowan (Eds.), Human Inquiry: A Sourcebook of New Paradigm Research. Chichester: Wiley.

Provus, M.M. (1971). Discrepancy Evaluation. Berkeley: McCutchan.

Rossi, P.H. (1982). Standards for Educational Practice. San Francisco: Jossey-Bass.

Scriven, M. (1972). Pros and cons about goal-free evaluation. Evaluation Comment, 3(4), 1-7.

Stake, R.E. (1980). Recommendations for those considering the support of naturalistic case-study research. Champaign, IL: University of Illinois.

Stufflebeam, D.L. (1983). The CIPP model for program evaluation. In G. Madaus, M. Scriven & D. Stufflebeam (Eds.), Evaluation Models: Viewpoints on Educational and Human Services Evaluation, (pp. 117-141). Boston: Kluwer-Nijhoff.

Stufflebeam, D.L. (1990). Professional standards for educational evaluation. In H. Walberg & G. Haertel (Eds.), The International Encyclopedia of Educational Evaluation, (pp. 94-106). New York: Pergamon Press.

Wildemuth, B.M. (1981). A Bibliography to Accompany the Joint Committee's Standards on Educational Evaluation. Eric Clearinghouse on Tests, Measurement, and Evaluation. Princeton: Educational Teaching Service.

Worthen, B.R. & Sanders, J.R. (1987). Educational evaluation: Alternative approaches and practical guidelines. New York: Longman.

DEC Recommended Practices
Program Evaluation

Program evaluation consists of collecting and reporting information to answer significant questions about aspects of programs. Examples of such program aspects include child or family functioning, staff performance, educational materials, transition, classroom environments, parent participation, curriculum, program expenditures and community programming needs. Answers to such evaluation questions might serve: a) to make decisions within a classroom; b) to formalize policy; c) to determine the viability of implementing a new program; d) to modify and improve program practices; e) to determine how funds should be allocated; f) to support the continuation, expansion, or discontinuation of a program; and g) to demonstrate accountability or cost-effectiveness.

Many of the following best practice indicators are congruent with standards presented by the Evaluation Research Society (Rossi, 1982) and by the Joint Committee on Standards for Educational Evaluation (Joint Committee, 1981; Worthen & Sanders, 1987). As there is substantial overlap between the two sets of standards and recommendations of task force members, individual citations for the best practice indicators are not provided. The framework for grouping these indicators according to four attributes of evaluation (utility, feasibility, propriety, and technical adequacy) approximates the approach used by the Joint Committee (1981).

Utility

PE1. Program evaluators or staff identify audiences involved in or affected by the evaluation so their needs and expectations can be addressed and their cooperation obtained.

PE2. The evaluator(s) must be competent (i.e., received training) to perform the desired evaluation and must be trustworthy.

PE3. Information collected is sufficient in scope, and derived from sources sufficient in credibility, to address pertinent evaluation questions.

PE4. Program evaluators describe thoroughly their assumptions, perspectives, methods and rationale used to generate and interpret findings so that the audience can judge the basis for decisions.

PE5. Evaluation reports clearly describe the purpose and rationale of the evaluation, the specific evaluation questions addressed, the program aspects being evaluated (materials, program components, staff performance, parent participation), the programmatic context, the evaluation procedures (design, data collection, analysis, etc.), findings, conclusions, and recommendations.

PE6. Program evaluators present their findings clearly, completely, and fairly in language the audiences understand.

PE7. Program evaluators present multiple findings or recommendations in order of relative importance.

PE8. Program evaluators disseminate their findings in a timely manner so that audiences can best use the information.

Feasibility

PE9. Program evaluators conduct evaluations with minimal disruptions to the program, staff and families.

PE10. Before beginning data collection, program evaluators, adminstrators, and or staff determine that the evaluation plan is an effective, ethical, legal and fiscally responsible use of resources.

Propriety

PE11. Program evaluators report findings in a legal and ethical manner that is in due regard for the rights and welfare of participants and audiences.

Technical Adequacy

PE12. Program evaluators describe the focus of an evaluation (e.g., program, materials) as precisely as possible.

PE13. Program evaluators describe and examine precisely the context in which the object of the evaluation exists to determine the influences of the context on the object.

PE14. Program evaluators describe and monitor the purposes, designs, and procedures of an evaluation in enough depth and precision to permit adequate critique, management and/or replication of the evaluation.

PE15. Whenever appropriate, program evaluators assess multiple sources of information.

PE16. Program evaluators describe and justify sources of information and sampling procedures so that the adequacy and defensibility of information can be assessed.

PE17. Measurement instruments and procedures are appropriate for the characteristics of the respondent (e.g. handicapping condition, gender, language, culture, developmental level).

PE18. Program evaluators select, develop, and use measurement instruments and procedures in ways that assure that the interpretation of the information is reliable and valid for the intended use.

PE19. Program evaluators pilot-test locally developed instruments/procedures to insure technical adequacy, validity and reliability.

PE20. Program evaluators systematically review and correct (if necessary) the collection, storage, management, analysis and reporting of program evaluation data.

PE21. Program evaluators use for data analysis the simplest systematic procedures that are appropriate, given the purposes and design of the evaluation and the nature of the data.

PE22. Program evaluators describe and justify procedures for analyzing qualitative or quantitative information.

PE23. In assessment reports, program evaluators distinguish between objective findings (e.g. statistical and practical interpretations of information), opinions, judgments, and recommendations.

Early Intervention with Children who are Gifted

Steve Stile and Brenda Hudson

Opponents of identification and programming for young children who are gifted have argued that (a) "hurrying" young children is potentially damaging, (b) standardized intelligence measures have lower reliability for these children, and (c) that a potential exists for misidentification of children who are "early bloomers" rather than "truly gifted" (Kitano & Kirby, 1986). Such opposition has resulted in delay of identification and services in many school districts until the third or fourth grade. Gallagher (1988) has called for attention to needs of young children as one priority in his national agenda for educating children who are gifted. In his analysis, young children are one of several subpopulations of children who are underserved.

Despite the opposition, a growing number of authorities in the field of gifted education have pinpointed benefits of early intervention (Stile, Kitano, Kelley, & LeCrone, in press). First, early recognition can provide opportunities for professionals and parents to interact on issues of development and advocacy (Karnes, Shwedel, & Linnemeyer, 1981). Second, enriched preschool programs provide opportunities for young children to nurture their high potential and demonstrate their strengths (Kitano, 1990). Third, early recognition and nurturance of talents may foster children's mental health (Karnes & Johnson, 1991). Fourth, early childhood programs have been viewed as the best policy initiative for disadvantaged youth (VanTassel-Baska, Patton, & Prillaman, 1989). Fifth, prevention of

---

Members of the working group for this strand were: Ann Berman, Janet Candelaria, Merle Karnes, Mary Brady Kovacs, Barbara Morrison, Ann Stile, and Nancy Tafoya.

under achievement among students who are gifted may be accomplished in part by early identification and placement in challenging preschool and kindergarten programs (Kitano & Kirby, 1986).

In recognition of these and other benefits, the number of early childhood programs for children who are gifted has increased over the past 10 years especially at the kindergarten level. Stile, et al. (in press) surveyed 50 states, five territories, and Washington, D.C. Responses were received from 100% of the states, 60% of the territories, and Washington, D.C. Respondents reported over 51 preschool programs in 14 states and 1 territory. Kindergarten programs for children who are gifted were reported in 29 states and 1 territory within over 2,655 school districts. Kindergarten programs are funded through regular education (40%), special education (17%), and other (13%) sources. The primary source of preschool funding is parent tuitions.

Recommended Practices

Seventy-seven indicators of recommended practice have been validated by the field for use in early intervention programs for children who are gifted in 13 areas which are defined briefly below.

Assessment

According to Bailey and Wolery (1989), "assessment may be defined as the process of gathering information for the purpose of making a decision (p.2)." With respect to programs for preschoolers who are gifted, assessment is interdisciplinary, considers multiple domains and uses a variety of sources and methods such as naturalistic observations, family interviews and standardized instruments. Assessments are conducted in order to make decisions in relation to identification and screening, eligibility, program planning, ongoing monitoring, and final program evaluation.

IEP

Although students who are gifted are not included in federal legislation requiring individualized education programs, a number of states have recommended or required IEPs for these students (Kitano & Kirby, 1986). IEPs for preschoolers who are gifted are developed by members of multiple disciplines as well as family members. IEPs reflect the cultural, linguistic, and religious diversity of families and address multiple domains of development.

Service Delivery Model/Environment

The service delivery model/environment for preschoolers who are gifted is appropriate for developmental age, allows ample use of imagination, and employs a large variety of activities and materials. The indicators of recommended practice are based upon the assumption that quality of the setting in which services are provided impacts significantly upon development in multiple domains.

General Curriculum/Intervention Strategies

General curriculum and intervention strategies for preschoolers who are gifted provide opportunities to learn through engagement in activities young children enjoy. Curriculum activities encourage critical thinking, creativity, and problem solving while focusing on social problems or broad themes such as ecology. Preschool forms of academics are also addressed. The strategies are derived from and based upon (a) individual abilities and needs of the children, (b) families' preferences, and (c) philosophy of the program.

Communication Interventions

According to Kitano and Kirby (1986), "Effective communication requires several different skills: articulating orally and in writing one's feelings and ideas, recognizing and interpreting the feelings and expressions of others, and understanding visual cues (p. 258)." Communication interventions for preschoolers who are gifted involve professionals who participate with children as "co-learners" in activities, foster exploration of different ways of communicating (e.g., sign language), encourage communication among classmates or with normally developing or developmentally delayed children throughout the day, and provide opportunities to exchange ideas, express opinions, and tell about feelings.

Motor Interventions

Motor development refers to the process of acquiring the necessary postural control and movement components to perform purposeful volitional movements (Bailey & Wolery, 1989). Motor interventions result in achievement of motor milestones such as sitting or running which are results of combining and recombining components. For preschoolers who are gifted, opportunities should be provided to use large and fine motor skills, to explore alternative ways of movements, and occupational and physical therapy support staff should participate in planning intervention activities when needs arise.

Cognitive Interventions

According to Flavell (1982), cognition is composed of unobservable events, their subsequent comprehension, and resultant response. For young children who are gifted, professionals should encourage group problem solving, praise children for their ideas and solutions, and respond to children's questions with appropriate levels of interest and attention. Cognitive interventions are applied to assist preschoolers who are gifted to attain higher order understanding, skills, and attitudes.

Adaptive Behavior Interventions

Adaptive behavior consists of changes in children's behavior as they adapt to the environment in relation to their levels of maturation, development, and learning. As described by Kitano and Kirby (1986), "adaptation consists of two complementary processes: (a) assimilation, or incorporating features of the environment into the child's existing structures, and (b) accommodation, the modifying of one's structures in response to environmental demands (pp. 48-49)." Professionals base adaptive behavior in such areas as self-care on children's individual characteristics and needs reflected in IEPs.

Social-Emotional Interventions

Social-emotional interventions with young children who are gifted address the quality of interpersonal relationships with peers and caregivers across a variety of settings (e.g., the classroom, school, community, and home). As Kitano and Kirby (1986) have pointed out, "not all gifted children are superior in social knowledge (p. 64)." Therefore, interventions for preschoolers who are gifted address development of appropriate interactions, and target inappropriate interactions for change. Strategies include acknowledging and respecting children's feelings and personality traits, providing small group activities designed to foster cooperative learning, reorganizing group activities to achieve ethnic/gender mix, and dealing with inappropriate interactions with discretion and flexibility.

Transition

Transition is the process of change between services. Professionals attempt to foster smooth transitions in a variety of ways for caregivers and service providers. Activities include organizing field trips to public school kindergarten programs for children and caregivers, developing transition plans, and providing previous assessment information to public school/other systems upon request.

Personnel Competence

According to Kitano and Kirby (1986), experts tend to agree that teachers of students who are gifted need expertise in curriculum development and appropriate modifications for this population, knowledge of instructional strategies and materials, and an ability to effectively communicate within the education ecosystem. Personnel development efforts for gifted preschool programs include recruitment, preparation, and retention of personnel from all early intervention-related disciplines.

Program Evaluation

Planned evaluation is carried out in order to make informed decisions about individual children and to identify changes that need to be made that impact entire programs. This requires that both continuous (formative) and overall (summative) evaluation techniques be employed. In order to be useful, evaluation efforts need to be timely and accurate while recognizing limited resources and problems unique to preschoolers who are gifted. For example, Renzulli and Smith (1979) have pointed out that a behavioral objectives model is inappropriate because it requires a focus on behaviors that can be observed and counted rather than on higher order cognitive processes such as those identified by Bloom (1956).

Family Participation

Family members are equal members of and active participants in programs for preschoolers who are gifted. Family members provide information to professionals in relation to program eligibility. They also work with professionals in the development of IEPs. Other participation includes field trips, reinforcing concepts at home, parent group meetings, mentoring, assisting in the classroom, and collecting/developing instructional materials. Professionals assist families by providing such resources as guest lecturers, books, audio tapes, films, and other sources of information and skill.

References

Bailey, D. B., & Wolery, M. (1989). Assessing infants and preschoolers with handicaps. New York: Merrill.

Bloom, B. S. (1956). Taxonomy of educational objectives: The classification of educational goals: Handbook I: Cognitive domain. New York: David McKay.

Flavell, J. H. (1982). On cognitive development. Child Development, 53, 1-10.

Gallagher, J. J. (1988). National agenda for educating gifted students: Statement of policies. Exceptional Children, 55, 107-114.

Karnes, M. B., Shwedel, A. M., & Linnemeyer, S. A. (1981). Survey of programs for the gifted. Unpublished manuscript, University of Illinois.

Karnes, M. B., & Johnson, L. J. (1991). The preschool/primary gifted child. Journal for the Education of the Gifted, 14(3), 267-283.

Kitano, M. K. (1990). A developmental model for identifying and serving young gifted children. Early Childhood Development and Care, 63, 19-31.

Kitano, M. K., & Kirby, D. F. (1986). Gifted education: A comprehensive view. Boston: Little, Brown.

Renzulli, J. S., & Smith, L. H. (1979). Issues and procedures in evaluating programs. In A. H. Passow (Ed.), The gifted and the talented: Their education and development Chicago: University of Chicago Press.

Stile, S. W., Kitano, M., Kelley, P., & LeCrone, J. (in press). Early intervention with gifted children: A national survey. Journal of Early Intervention.

VanTassel-Baska, J., Patton, J., & Prillaman, D. (1989). Disadvantaged gifted learners at-risk for education attention. Focus on Exceptional Children, 22(3), 1-15.

DEC Recommended Practices
Programs for Children who are Gifted

Assessment

G1. Assessment occurs through an interdisciplinary team effort.

G2. Professionals consider the value families place on “giftedness“ when conducting assessments of children.

G3. Professionals conduct assessments of children in warm, friendly environments.

G4. Licensed school psychologists/diagnosticians participate on the assessment team.

G5. Assessment is an ongoing process.

G6. Children’s levels of development are considered within and across multiple domains (e.g., cognitive, motor, communication, social).

G7. Professionals use a variety of sources and methods, such as naturalistic observations, family interviews, and standardized assessment in the assessment process.

G8. Professionals may use parent nomination as one form of information when assessing children for eligibility purposes.

G9. Professionals use assessment instruments and techniques that are sensitive to the child’s and family’s cultural values and primary language spoken in the home.

IEP/IFSP

G10. The IEP/IFSP process actively involves members of multiple disciplines (inter- or transdisciplinary) as well as family members.

G11. IEP/IFSPs reflect children’s strengths as well as their needs.

G12. The IEP/IFSP objectives reflect the cultural, linguistic, and religious diversity of families and children in the program.

G13. The IEP/IFSP addresses multiple domains (e.g., cognition, communication, social skills).

C14. Elementary-level academic goals/objectives are developed only at the request of the families or in response to demonstrated readiness of the child.

Service Delivery Model/Environment

G15. Professionals provide a warm, positive, stimulating (e.g., bright, colorful) environment.

G16. Professionals organize classrooms into well-defined areas for specific activities.

G17. Professionals change activities and materials often.

G18. Professionals provide clear and consistent cues about transitions within activities or routines in the schedule.

G19. Environments contain child-sized furniture and equipment appropriate for developmental age ranges.

G20. Environments allow for ample use of imagination and opportunities to create with a variety of hands-on activities.

G21. Children who are not gifted (normally developing, developmentally delayed) participate in the program all or part of the time.

General Curriculum/Intervention Strategies

G22. The curriculum integrates the social science disciplines by focusing on social problems or broad themes (such as technology or ecology).

G23. Professionals employ thematic units as a routine aspect of the curriculum.

G24. The time allotted to curriculum units is flexible in order to take advantage of children's interests and spontaneous ideas.

G25. The program provides frequent and appropriate field trips.

G26. Curriculum activities encourage critical thinking, creativity, curiosity, and problem solving.

G27. Professionals use games and activities (e.g., calendar) to teach preschool forms of academics, such as letter and number recognition.

G28. Professionals give children opportunities to learn through engagement in activities they enjoy.

G29. Curriculum activities allow exploration of the beginning (e.g., awareness) stages of career development.

G30. Professionals integate learning opportunities into natural activities rather than artificially structured activities (e.g. putting 10 toy people in a bus and taking them for a ride rather than counting while putting 10 pegs in a pegboard).

G31. Professionals vary the settings, materials, personnel, cues, and consequences in order to promote generalization.

G32. The program provides guest speakers when appropriate (e.g., a chemist visits the program and provides a demonstration of various chemical reactions during an energy unit).

Communication Interventions

G33. Professionals encourage children to exchange ideas, express their opinions and talk about their feelings.

G34. Professionals encourage children to listen to others without interrupting them.

G35. Professionals encourage children to solve disputes by discussions and compromise.

G36. Professionals use open-ended questions.

G37. Curriculum activities foster (on a daily basis) children's exploration of different ways of communicating (e.g., Spanish, sign language).

G38. Curriculum activities encourage communication among peers throughout the day.

G39. Professionals participate with children as "co-learners" in activities.

Physical/Motor Interventions

G40. Children have opportunities to use large-motor skills (e.g., swinging, climbing, dancing).

G41. The program provides supervised outdoor playground activities daily.

G42. Children explore alternative ways of movement indoors and outdoors (e.g., children can scoot to circle time).

G41. Active manipulative activities provide opportunities for children to develop fine-motor skills.

C42. Occupational and physical therapy support staff participate in planning intervention activities when children's needs dictate.

Cognitive Skills Interventions

G43. Professionals enlist families to support at home the use of open-ended questioning, alternative thinking, problem solving, and higher order thinking skills such as synthesis and evaluation.

G44. Professionals employ a holistic approach to learning.

G45. Preschool-level books are available to children in the classroom.

G46. Professionals encourage group problem solving.

G47. Professionals praise and encourage children for their ideas and solutions.

G48. Professionals respond to children's questions with appropriate levels of interest and understanding.

Adaptive Behavior Interventions

G49. Professionals base adaptive behavior interventions (e.g., self-care, independence, etc.) on children's individual characteristics and needs as reflected in the IEP/IFSP.

Social-Emotional Interventions

G50. Professionals acknowledge and respect children's feelings and personality traits.

G51. Professionals encourage children to identify and verbalize their feelings.

G52. Children participate in small group activities designed to foster cooperative learning.

G53. Professionals make children feel their contributions are important and valued.

G54. Curriculum activities are fun and encourage laughter.

G55. Counselors and psychologists serve as support staff when needed.

G56. Professionals may reorganize ongoing group activities to achieve ethnic/gender mix.

G57. Professionals encourage children to interact with peers but do not force interaction if children express a preference for being alone.

G58. Professionals deal with inappropriate behavior firmly but with discretion and flexibility.

Transition

G59. The program provides parents/family members with an orientation about what to expect in public school kindergarten.

G60. The program provides assessment information to public schools if requested by parents.

G61. The program organizes field trips to public school kindergartens for children and parents.

G62. Professionals develop preschool-public school transition plans.

G63. Private preschool and public-school kindergarten eligibility criteria are consistent in order to achieve continuity.

Personnel Competence

G64. Professionals have coursework, training, and experience in gifted education.

G65. Professionals have knowledge of gifted research findings.

G66. Professionals engage in ongoing upgrading of skills and knowledge through inservice training and participation in professional organizations.

Program Evaluation

G67. Program evaluation includes an ongoing record of informal comments and suggestions by families and staff.

G68. Families provide a formal written evaluation at the end of the year of their child's participation.

G69. Program evaluation includes information solicited from multiple sources.

G70. Program evaluation information is both qualitative and quantitative in nature.

G71. Professionals from outside the program are employed as program evaluators.

Family Participation

G72. Programs allow families to participate at their level of choice (e.g., acquire information, work as teaching assistant).

G73. The program makes available to families a resource library of books, audiotapes, films and other materials.

G74. The program organizes and provides periodic parent group meetings, if the parents express a desire for the meetings.

G75. Professionals welcome family members in the preschool program at anytime.